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ABSTRACT

This information paper on the major income and employment issues affecting older Americans survey the economic impacts of an aging population, presents an agenda for future research into principle income and employment policy issues, and provides an outline of those policy options to be reviewed as a basis for governmental policy formation. Benefit adequacy and fairness, retirement systems, pension plan funding, the impact of extending the individual's working life, and the coordination and design of current retirement policies are examined. The implications of migration and regional development patterns and the impact of an aging population on employment, income, wealth, government spending and revenues, pension plans, and financial markets are analyzed. Following a discussion of data availability, research priorities are identified in the following areas: finance, benefit adequacy and fairness, employment, and systems coordination and design. The position taken on social security and public retirement systems by business, labor, and the aged is set forth. Conflicts among objectives, major gaps in identified policy options, and the relationship of policy options to economic trends are described. A total of 120 recent related research projects are listed in an appendix. (MN)

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COMMITTEE PRINT

EMERGING OPTIONS FOR WORK AND RETIREMENT POLICY

(An Analysis of Major Income and Employment Issues With an Agenda for Research Priorities)

AN INFORMATION PAPER

PREPARED FOR USE BY THE

SPECIAL COMMITTEE ON AGING
UNITED STATES SENATE

JUNE 1980

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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PREFACE

On February 14, 1979, the U.S. Senate Special Committee on Aging contracted with the Urban Institute of Washington, D.C., to conduct a study of the major income and employment issues affecting older Americans. The resulting information paper, entitled "Emerging Options for Work and Retirement Policy," is a comprehensive document which surveys the economic impacts of an aging population, presents an agenda for future research into the principal income and employment policy issues, and provides an outline of those policy options that the committee should review in guiding Congress to legislative answers to these major policy questions.

The committee would like to acknowledge and thank James R. Storey, principal author and coordinator of the study, for his leadership in successfully synthesizing a massive amount of material in order to present a rather complete range of policy options for committee consideration. Acknowledgment and thanks are also due to several of Mr. Storey's colleagues at the Institute who contributed in various ways to the formulation of this document. Valuable writing and research assistance was received from Margaret B. Sulvetta and Wendy Goldberg. Richard Wertheimer, Gary Hendricks, Sheila Zedlewski, George Peterson, Nancy Barrett, and Denys Vaughn-Cooke provided useful comments and ideas to the project. Brenda Brown, Mary Mingo, and Penny Rosenwasser assisted in the preparation of manuscripts.

During the past several years, it has become more and more apparent that older Americans desire expanded "options" in the areas of retirement income planning and employment. A rising rate of inflation, deficiencies in the present structure of social security and certain public and private pension programs, along with an increasing interest on the part of older workers in part-time employment and other alternative work modes, indicate that these issues will be among the most critical ones for policymakers in the 1980's. The Members of the Senate Special Committee on Aging believe that "Emerging Options for Work and Retirement Policy" will be extremely valuable to them and to other professionals in the field of aging as we formulate an agenda which can successfully meet the crucial retirement income and employment needs of older Americans during the current decade.

LAWTON CHILES,
Chairman.
PETE V. DOMENICI,
Ranking Minority Member.

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Chapter 1

MAJOR POLICY ISSUES AFFECTING THE INCOME AND EMPLOYMENT OF OLDER AMERICANS

With the 21st century only 20 years away, Congress and the American people must become aware of the problems for retirement that lie ahead. For several reasons it is particularly important that issues of income and employment of the elderly be fully understood and debated. First, we have entered an era of pension reform following 37 years (1935–72) of rapid growth in both public and private pension plans that greatly improved financial circumstances of the aged but also left important gaps and inadequacies. Second, there are numerous pressures to change retirement policies and pension systems, and such changes have profound effects on: Individual well-being and behavior; the circumstances of firms, unions, and governmental units; fiscal policy; financial markets; and the economy overall. Third, the pressures for change are in conflict, with no simple remedies in sight.

On the one hand, there are good reasons to improve pension coverage and benefits. Such pressures arise from individuals' seeking:

—Greater replacement of preretirement earnings.
—Better protection from inflation.
—An end to poverty for the aged.
—Better opportunities to enhance postretirement income through secondary jobs.
—A fair break for working women; and
—Greater portability of pension credits for mobile workers.

On the other hand, resistance to such improvements results from a fiscal squeeze compounded by economic uncertainty. The fiscal problems are:

—Projections of a rapid rise in Federal spending on the aged due mainly to the aging of the population.
—A projected long-run deficit for social security.
—Financial difficulties of some State and local governments in meeting pension obligations; and
—Rising costs of private pension plans due to requirements established by the Employee Retirement Income Security Act (ERISA).

The financing of pensions was easier during the 37 years of growth, with immature systems being funded by the contributions of a mushrooming population of young workers and a tremendous growth in the national economy. However, today there are no easy ways to relieve the pressure:

—Further tax increases will be strongly resisted at all levels of government.

—Reductions in the share of public spending for children and youth that would be expected as the population ages would not be sufficient to offset increased spending on the aged.
—Pressure to raise the normal retirement age will be resisted by the many people who look forward to early pensions.
—Possible savings from elimination of various "windfall" retirement benefits for the "pension elite," while substantial, could not alleviate by itself the fiscal constraints to major benefit improvements; and
—Legislative efforts to reduce the cost of social security or other public pensions through benefit reforms will engender hard fought political battles.

While major legislation to achieve savings in social security disability benefits has been reported in the Senate and in the House, no major reforms in income security for the aged are likely to be considered seriously in this session of Congress. Instead, current attention has been focused on narrow changes in law while larger scale changes are the subject of task forces, commissions and academic study. Thus, in the short run, proposals for modest adjustments in benefit rules will likely be the center of attention. Major action, such as a new approach to social security financing, reform of the treatment of women under social security, or Federal regulation of public employee pensions, will undoubtedly await consideration of the findings of the President's Pension Policy Commission, the National Commission on Social Security, the Social Security Advisory Council, and the HEW Task Force on Social Security Universal Coverage. (The last two groups have already issued reports.) The issues discussed in the following pages will likely constitute the central themes of the coming policy debate.

This chapter is organized around 12 major policy issues, selected for their breadth as public policy concerns and for their impact on the aged. While certainly not the only way to identify and organize the issues of interest, this structure provides a useful framework within which to discuss: (1) The significance of each issue; (2) its legislative context; (3) how it relates to other major issues; and (4) the underlying policy issues and research questions important in its eventual resolution by policymakers.

These 12 major issue areas discussed in this chapter are delineated in terms that reflect the primary concerns voiced in public debate, although different (often opposite) perspectives on each can certainly be taken. The 12 issues are stated as follows:

Issues of benefit adequacy and fairness:

A. Are retirement incomes and benefits for the aged inadequate?
B. Are subgroups of the retired and aged treated unfairly relative to others?

Financial issues:

C. Are retirement systems and pension plans adequately funded?
D. How should the cost of providing for retirement income be shared?
E. Do pension plans discourage saving and investment?
F. Will an aging population necessitate an increase in government spending?

Employment issues:

G. Should individuals' working lives extend to older ages?

H. Will critical labor market scarcities and/or surpluses result from present policies and trends?

Issues of system coordination and design:

I. Should the present mix of public and private provision for retirement income be changed?

J. Should Federal control be extended over public employee retirement plans?

K. Should the social insurance approach to old age income security be revised?

L. How should major changes in retirement policies and benefit systems be implemented?

This structuring of policy issues should be helpful in understanding the full spectrum of policy issues relevant to income and employment for the aged and their interrelationships.

I. ISSUES OF BENEFIT ADEQUACY AND FAIRNESS

A. Are Retirement Incomes and Benefits for the Aged Inadequate?

A study conducted by the Social Security Administration of new claimants for retirement benefits in 1968–70 showed that about a third of new beneficiaries age 65 were still receiving earned income, and a little over half received pension benefits from private or public employee plans. However, about one-third of newly retired social security beneficiaries had neither earnings nor pension benefits to supplement their social security checks (about 400,000 new retirees based on today's annual volume of new claimants). Over half the beneficiary group had asset income, but the median annual figure was only about $600. For all married-men beneficiaries surveyed and their spouses, 37 percent of their income was derived from earnings, 25 percent from social security, 20 percent from other pensions, and 13 percent from asset income. For age-65 claimants, those who received both social security and private pension benefits had 54 percent of average wages on their jobs of longest duration replaced. This ratio was less than 40 percent for 18 percent of these claimants, but over 70 percent for 17 percent of the claimants. (It was estimated that a 70 to 78 percent replacement rate would have fully replaced pre-retirement disposable income.)[1]

The absence of pension entitlement for many people over age 65, the inadequacy of social security as a full support for retirement, the limited amounts of private savings, and the failure of the welfare system to alleviate poverty fully have resulted in a sizable number of elderly who are poor. A study by the Congressional Budget Office has shown that, of the 16.1 million households with heads age 65 or older in 1976, 9.6 million were poor based on income from private sources, although social security income moved 6.1 million of these

[1] "Reaching Retirement Age: Findings from a Survey of Newly Entitled Workers, 1968-70," Social Security research report No. 47, U.S. Department of Health, Education, and Welfare, Washington, D.C., November 1975.

households over the poverty line. Cash welfare and food benefits further reduced the number of poor households with aged heads from 3.5 to 2.3 million, but that still left 14 percent of aged households in poverty, and another 21 percent had incomes less than 1.5 times the poverty level. In contrast, for households with nonaged heads, the incidence of poverty and near-poverty was only 11 percent and 9 percent, respectively.[2]

Existing long-term projections of retirement income deal more with the adequacy of its financing than its adequacy to support retirees and their families. Few household income projections have been completed that incorporate the 1977 social security amendments, and those projections have been necessarily limited by: (1) An overly simplistic simulation of private pension plans; (2) an inadequate representation of these plans' interaction with social security; (3) a limited exploration of the impact of different socioeconomic assumptions; and (4) a lack of analysis of changes in individuals' decisions about retirement versus employment. However, it is generally assumed that, given a continuation of current programs and economic trends, social security wage-replacement rates will not change much from present levels. The incidence of aged poverty should decline with real increases in social security benefits, but poverty income levels would still persist for a substantial share of the elderly, perhaps affecting larger absolute numbers of people when the "baby boom" generation reaches old age.

Likewise there is no guarantee that current programs left unchanged will ever yield a reasonable earnings-replacement rate in retirement. Indeed, the current distribution of retirement benefits could become more bimodal. As current systems mature, more middle- and upper-income workers may become multiple beneficiaries under uncoordinated public and private pension plans, while substantial numbers of less fortunate workers—including some who presently have middle-class incomes—may accumulate little or no private plan benefits to supplement social security.

The issue of adequacy may be subdivided into four policy questions: (1) Whether income available to persons already in old age is adequate; (2) whether income for new retirees and persons just reaching age 65 is adequate; (3) whether future income for the latter group and for future cohorts of retired/aged will be adequate: and (4) the converse issue of the extent to which people are being overpensioned.

1. DO TODAY'S AGED INDIVIDUALS HAVE ADEQUATE INCOMES?

The goal of providing an "adequate income in retirement in accordance with the American standard of living" was set forth in title I of the Older Americans Act. A comparison of the income of families with members who are 65 years of age and older with that of younger families shows why the question of income adequacy of older Americans has received considerable attention. In 1975, the median income of single persons age 65 and older was $3,408, but the median income of single persons age 55–64 was $5,154, and that of single persons age 35–44 was $10,218. Thus, the median income of elderly single persons

[2] "Poverty Study of Families Under Alternative Definitions of Income," Congressional Budget Office, background paper No. 17 (revised), June 1977.

was just 66 percent and 33 percent, respectively, of the median income for these two younger age groups. A comparison of the income of two-person families headed by individuals 65 years of age or older with younger two-person families for 1975 found that the median income of the older two-person families was $7,449, while it was $13,109 for two-person families headed by individuals aged 55–64 and $14,648 for two-person families whose heads were in the 45–54 age category. The ratios of the median income of older two-person families to the younger families' medians were 43 percent and 50 percent, respectively.[3]

These statistics suggest that the income of older Americans is inadequate relative to the income of the younger population. But such a conclusion may ignore an important complicating factor—a simple gross money income measure may not provide an accurate comparison of the overall economic well-being of these subgroups. Moon and Smolensky argue that the traditional money income measure of economic well-being is inappropriate because it does not measure a family's command over all goods and services.[4] Money income ignores or understates many resources available to families, such as net assets and eligibility for in-kind transfers. This limitation is particularly relevant when the money income measure is used to compare the retired population's standard of living with that of the nonretired population's standard of living. Both the income *needs* and the income *resources* of these groups differ.

Money income understates the economic well-being of retired persons for the following reasons:

—Tax liability. Surveys measure gross pretax income, but a large portion of the income of retired persons (social security, for example) is not taxable. In addition, nonearned income is not subject to the payroll tax.

—Availability of in-kind transfers. Many in-kind transfers, such as medicare health benefits, are available to most older Americans but not to many younger Americans, and these benefits are not counted as income.

—Liquid assets. Savings are an income resource which may be tapped in retirement.

—Home ownership. Retired persons often enjoy an implicit rent from their owner-occupied housing.

—Work-related expenses. Retired persons no longer must bear job-related expenses such as travel to work, union dues, health and retirement plan contributions.

—Child rearing. Retired families typically no longer bear expenses related to child rearing.

—Leisure as a resource. The increased leisure time of retired persons has an economic value that should be included in a measure of their well-being.

—Shared household arrangements. Some aged individuals share homes with relatives and experience economies in household expenses relative to typical young families living in their own homes.

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[3] This information and additional data are discussed more fully in Sheila Zedlewski, "Defining Retirement Income Adequacy," Urban Institute working paper 5003-03, March 1978.

[4] Marilyn Moon and Eugene Smolensky, "Income, Economic Status and Policy Toward the Aged," Institute for Research on Poverty, University of Wisconsin (Madison), May 1976.

Money income may overstate the well-being of the aged in several other respects such as: The higher health care expenses of the aged; and greater limits on mobility which reduce access for shopping, post-retirement work, acceptance of public services, and utilization of leisure time.

There is no question that a significant number of the aged live in poverty as officially defined. What is unclear is the real extent and nature of the economic deprivation they suffer, and the possible causal links between economic deprivation in old age and the public policies, private pension practices, and economic and social circumstances that affected the aged poor earlier in life. There is little known as well about the income losses suffered by the nonpoor aged relative to their prior living standards and what the causes and effects of these income gaps may be.

2. ARE NEW RETIREES AND SENIOR CITIZENS RECEIVING ADEQUATE BENEFITS?

The prior issue concerned the overall financial well-being of the population already in old age today. This second issue concerns the adequacy of income available to those just now retiring or reaching old age.

Although a completely accurate measure for the wage-replacement rate needed to maintain prior living standards in retirement may be lacking, a 70 to 80 percent replacement rate is usually needed to maintain preretirement after-tax cash income. Thus, pension plans are often designed so that benefits replace a substantial part of earnings over the last few years before retirement. On the other hand, pensions may be related to an employee's career earnings or to total contributions to a retirement fund, in which case a high rate of replacement of final wages is not assured. Many public employee pension plans reflect the former design, while social security embodies the latter, and private pension plans are well represented in both categories.

The more closely a pension benefit is related to final earnings, the more it is subject to abuse through manipulation of the earnings level just prior to retirement. On the other hand, social security's methods yield low wage-replacement rates for those who had relatively low earnings early in their careers or who were out of the labor force for long periods. Social security compensates such workers for the effects of career averaging by replacing a much higher proportion of low average earnings than of higher amounts. Added benefits for spouses and dependents raise replacement rates for retirees who can claim them. On average, social security now replaces about 43 percent of final wages, but this rate is 73 percent, for example, for a low-wage married worker. A high-wage single worker has a replacement rate near 20 percent. Legislation enacted in 1977 to correct a flaw in benefit indexing will keep future replacement rates near their present levels. (They would have risen under the old law.)

The level of wage replacement for retirees involves aspects of retirement systems other than benefit formulas and requires tradeoffs with other goals. Liberal vesting and portability rules result in higher total replacement rates, for example, but also encourage labor mobility. Benefits for dependents and survivors increase replacement for

some retirees but at the cost of lower replacement rates for others, particularly working women under social security who also qualify as dependents or survivors. SSI benefits have the effect of increasing replacement for persons with very low wages, but SSI levels out social security benefit differentials based on past earnings, thereby negating social security's wage replacement for recipients of both SSI and social security (about 8 percent of social security beneficiaries age 65 or older).

Coordination of credits and benefits among social security and public employee systems is also a factor. For example, retirees eligible for more than one pension could be much better off, or much worse off, than the less mobile retiree, depending on the particular sequences and timing of the different spells of employment under separate systems. The wide variations in wage replacement that now result raise an overall equity issue in regard to the fairness of retirement programs for different groups of people.

The desirable level of wage replacement depends on what we are willing to pay in foregone spending by those currently working to assure a given standard of living in retirement. However, the level raises social as well as economic issues, since higher replacement levels mean more independent living for retirees, more geographic mobility, and more physical separation of generations.

With respect to welfare programs, in July 1978, combined Federal SSI and food stamp benefits guaranteed an eligible aged person $229 in monthly income ($341 for a couple). These amounts are 88 and 105 percent, respectively, of the weighted average poverty index for aged households. Taking State supplemental SSI payments into account, nine States provide SSI and food stamps to individuals in excess of the poverty-level income. However, the participation rate in food stamps by eligibles over age 65 is quite low (no more than 50 percent). The Federal and State SSI payments alone exceed the poverty level in seven States for individuals and 17 States for couples.[5]

3. WILL FUTURE INCOME FOR THE AGED BE INADEQUATE?

This issue deals with two concerns—whether retirement income will remain adequate over a new retiree's lifetime, and how adequate incomes will be for future generations of retirees.

A fundamental problem with current retirement systems is that outcomes are so unpredictable that careful planning for retirement may be a useless exercise for most people. Social security policies depend on legislation that is often enacted rapidly at the end of a congressional session with little attention given to possible impacts on the private pension industry. Private pension offerings are determined in part by the structure of the social security system but mainly by a company's or industry's business outlook, by the competition for labor and the organization of labor, by tax incentives established by the Internal Revenue Code, and by Federal pension regulations. Pension plans for public employees respond to analogous forces in the public sector, plus the important factor of the political influence of different public employee groups on legislatures. Individual savings and investment decisions, while in part influenced by social security,

[5] "Welfare Reform Background Papers: Data on Current Selected Programs," Congressional Research Service report No. 79-83 EPW, Library of Congress, Mar. 23, 1979.

the income tax, and employers' pension policies, generally are made in ignorance of benefits likely to be available upon retirement and under conditions of extreme uncertainty concerning future inflation, real wage growth, time of retirement, longevity, health status, and future family responsibilities.

Thus, each of the major actors—governments, pension managers, labor organizations, and individual workers—makes policy decisions without adequate knowledge of likely future directions the other parties may take and largely in ignorance of how the various components of retirement income fit together, a vital factor in a highly mobile society where most workers will have held at least three different jobs before they retire and many will have held a government job as well as one or more private jobs.

In considering the adequacy of future income, a particular concern right now is how pension benefits are adjusted for inflation. Benefits paid by social security, Federal employee systems, railroad retirement, and some State and local pension systems are adjusted automatically each year for price increases. (Retired Federal employees actually receive semiannual adjustments.) Some State and local systems want to end automatic adjustments as a cost-saving measure; mounting pressures in Congress may revise the retired Federal employee adjustment to an annual basis.

Few private pension plans make adjustments tied directly to inflation, although many have increased benefits somewhat on an ad hoc basis in recent years. (About two-thirds of the plans in the Bankers Trust survey did so between 1969 and 1975.)[6] A key question with respect to private pension adjustments is what the long-term impact of inflation will be on the investment yields of pension funds.

The extent and nature of inflation adjustments and whether general inflation adjustments are appropriate for the aged will be crucial issues for some time to come, for we are in an era where workers and retirees may face high inflation rates for an indefinite period without price controls. Such a situation has not occurred since the boom of the 1920's, before social security was enacted, before early retirement was common, and before most private pension plans were established. Thus, a significant impact on attitudes of current workers toward retirement seems probable. The prospect of high inflation rates can affect drastically decisions on where to work, for how long, whether to save, how much and in what forms.

Inflation will also determine the generosity of the initial retirement benefits set by systems saddled with the tremendous costs of maintaining the real value of those benefits, and continued inflation will shift the relative importance of retirement income sources. For example, the average married man retiring in 1968–70 received 56 percent of his retirement income in social security benefits.[7] Assuming an annual inflation rate of 5 percent after a normal life expectancy of 14 years, his social security would rise to 72 percent of his retirement income if other pension benefits were not adjusted.

Thus, a continued expectation of high inflation rates would probably have the following effects: (1) It would increase social security's

[6] "1975 Study of Corporate Pension Plans," Bankers Trust Co., New York, 1975.
[7] "Reaching Retirement Age: Findings from a Survey of Newly Entitled Workers, 1968–70," Social Security research report No. 47, U.S. Department of Health, Education, and Welfare, Washington, D.C., November 1975.

importance as a source of retirement income; (2) it would prompt some governments to retreat from generous adjustment practices; (3) it would reduce the attractiveness of fixed annuity plans as a part of retirement planning; (4) it would discourage traditional forms of saving at fixed interest rates; and (5) it would spur more people of retirement age to continue working as a hedge against inflationary erosion of living standards. The realization of such expectations would substantially lower real income for those elderly people who cannot continue working and who depend on fixed pensions for part of their income. Clearly, adequate initial wage-replacement rates will be a hollow achievement for retirees if they live longer than prior generations and experience greater price increases over their longer retirement periods.

Two related issues are whether retirement benefits should be adjusted to reflect real economic growth occurring: (1) While working, and/or (2) after retirement. That is, should living standards for retirees be maintained relative to their position in the income distribution prior to retirement? Wage indexing, now a part of social security, protects the value of wage credits over time for covered workers relative to average wages in the economy. However, most public and private employee plans, with pension entitlements geared to pay just prior to retirement, do not conserve the value of wages credited long before the retirement age and, therefore, offer no protection of relative wage value for those workers who leave an employer well before retirement age. This is an important consideration in our society where job mobility is highly valued.

With respect to adjusting benefits paid after retirement, simply indexing benefits for price increases (as under social security) results in an unintended redistribution of real income to beneficiaries of indexed systems during recessions, but such beneficiaries sink to lower relative living standards during periods of real growth.

Another indexing question is whether a special price index relevant to expenditures of the aged should be used rather than the general Consumer Price Index. Some observers argue that the CPI understates the impact of inflation on the elderly. On the other hand, the CPI itself has been called into question for its treatment of housing costs (it assumes everyone's housing costs reflect current interest rates) and its failure to adjust to changes in the relative consumption of various goods and services over time as relative prices change.

4. ARE A SIGNIFICANT NUMBER OF RETIREES OVERPENSIONED?

Overpensioning—that is, provision of retirement income to an individual in excess of any reasonable measure of previous living standard or prior contributions to pension plans—occurs for three reasons:

—The absence of universal coverage of either workers or wages by social security.

—The failure of some private plans and most public employee plans to integrate their benefit provisions with the social security benefit structure to achieve reasonable wage-replacement rates in all cases; and

—The possibility of retirement and pension receipt at quite early ages under some plans, especially public employee plans, and most notably those for the military and police/fire personnel.

The absence of a universal system and the possibility for sequencing retirement from plans that pay benefits based on final years' pay adjusted for inflation permits some retirees to pyramid social security plus military, public employee, and private pensions into handsome sums largely financed by the contributions of others. For example, career military personnel often retire with full pensions (indexed for inflation) plus social security coverage by age 45 and still have 20 years or more in which to earn pensions under other public or private systems. A military retiree could draw a full pension adjusted for inflation at age 45, work 10 years in a private job and retire from that job with a pension at age 55, work in the civil service for 5 years and retire at age 60 with an inflation-proof pension starting at age 62, and begin receiving social security at age 62 as well. This 62-year-old would then have four monthly pension checks, three of them adjusted automatically for inflation, and could possibly have an annual pension income greater than final wages.

Since the social security system places a ceiling on wages covered in covered employment, and since the benefit schedule is weighted to favor low-wage workers, employee pension plans are often designed to provide greater retirement income protection at the upper end of the wage scale. Such "integration" with social security, the nature of which is regulated for private plans receiving tax exemption on their earnings, determines the total wage replacement retirees will receive from the combination of social security and a pension. As the social security wage base rises (it has risen from $6,600 in 1967 to $16,500 in 1977, to $22,900 in 1979, and will rise to $40,200 in 1986), a pension plan's integration method may need revision to avoid overpensioning, but such revisions often fall behind the changes in social security.

The Bankers Trust 1975 survey found that 65 percent of private plans studied were integrated with social security.[8] However, Federal employee retirement benefits are not coordinated with social security nor are the benefits paid by most State/local employee plans. It is in the public sector that failure to integrate benefits or to update an integration scheme is most likely to produce combined retirement benefits in excess of preretirement disposable income.

B. Are Subgroups of the Retired and Aged Treated Unfairly Relative to Others?

Critics of retirement systems and benefits for the aged question the fairness with which particular subgroups of retired workers and the aged are treated. These complaints are not surprising given the diversity of employer-sponsored pension plans, their lack of coordination with each other or with the social security system, the lack of universal coverage by social security, and the many unresolved issues within the social security system itself. The following paragraphs discuss these questions of fairness as they relate to the treatment of: Women relative to men, minorities relative to the general population, private-sector workers relative to public employees, and different age-cohorts of the retired population.

[8] "1975 Study of Corporate Pension Plans," Bankers Trust Co., New York, 1975.

1. IS SOCIAL SECURITY'S FAMILY BENEFIT APPROACH UNFAIR TO SECOND EARNERS AND DIVORCED SPOUSES?

The steady increase in the number of working women and the rising divorce rate are factors exerting substantial pressure for change in social security. The impacts of these trends have highlighted the equity problems of a social security system built to serve a more traditional population of intact, one-earner families. Working women who contribute to the system often earn little more in social security benefits in their own right than they would have received anyway as nonworking wives (who receive 50 percent of the amount of their husbands' retirement benefits without any prior contributions). There have been two liberalizations of the original rule that denied spouse benefits to divorced spouses, but there will no doubt be continued pressure for more generous treatment of former spouses. There is also likely to be increased pressure to provide benefit entitlements for nonworking wives independent of entitlements accrued by their working husbands. The basic issue is the extent to which social security should provide individual entitlements based solely on past work without regard to past or present family and dependency relationships. However, that issue may be resolved, there remains a problem of coverage for divorced spouses with no retirement credits on their own accounts.

2. DO PRIVATE PENSION POLICIES LIMIT COVERAGE AND BENEFITS FOR WORKING WOMEN?

Currently, older women receive little income from private pension plans. (Only 9 percent of white women age 65 or older and 2 percent of aged black women received private pensions in 1975.) [9] Since pension plans generally have required many years of full-time work before vesting (that is, before pension income was guaranteed, regardless of future employment status), most women have not qualified. Although the standards specified in the Employee Retirement Income Security Act (ERISA) of 1974 should improve the chances of all employees, including women, to receive pension benefits, women will remain at a disadvantage if: (1) Most pension plans continue to require long-term job continuity to receive substantial benefits; and (2) pension coverage is not broadened in the female-dominated sectors of the labor market. The current structure and coverage of the private pension system reflects not only its traditional emphasis on career employees but also the greater relevance of pensions in the past to male-dominated employee groups as a bargaining objective and as an achievable benefit.

Since women have longer lifespans on the average (18 years of life expectancy at age 65 compared to 14 years for men), they will suffer greater loss in real income due to the lack of inflation indexing for private pensions benefits. Given inflation at 5 percent yearly, a $1,000 monthly pension benefit at age 65 retirement would be worth only $416 in real dollars at time of death for the average woman who expects

[9] June O'Neill and Jean Vanski, "Sources of Income of the Elderly, With Special Reference to Women," Urban Institute working paper (forthcoming).

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to live on that pension for 18 years compared to $505 for the average man who expects to live 14 years.

Differences in longevity also have raised another pension issue—whether women should receive lower benefits than men in defined benefit plans, or pay greater contributions than men in defined contribution plans due to their longer average life expectancy. Women argue that such a distinction based on sex is unfair since comparable differentials based on factors such as race, education, income level, and marital status are not applied, even though these factors are also related to life expectancy. Courts have ruled against benefit differentials, but contributions differentials are still being contested.

3. DO PENSION AND WELFARE RULES LIMIT COVERAGE AND BENEFITS FOR MINORITY GROUP MEMBERS?

Problems of inadequate income tend to be worse for the aged in minority groups than generally. Census data for 1977 indicated that 36 percent of the black aged and 22 percent of the Hispanic aged had incomes below the poverty line, compared to 12 percent for elderly whites. Differences in pension coverage play a role in these income differences.

The private pension system covers less than half the workers employed in private industry and provides retirement benefits to an even smaller proportion of workers. Although many workers are not protected by private pensions, black workers are especially ill-advantaged. Among workers surveyed while aged 58–63 in 1969, only 20 percent of black workers, compared with 43 percent of white, had been covered by a private pension on their longest job. Of those covered workers who had retired completely by 1974, when they had attained age 63–68, 52 percent of the black group and 77 percent of the white group received private pension benefits.[10] The proportion of all black men age 65 or older receiving private pensions in 1975 (13 percent) was half the recipient rate for all white aged men (26 percent).[11]

Some of the racial differences in private pension coverage and receipt appear to result from substantial differences in job characteristics. Black workers were much less likely to have possessed job characteristics in which there is a high probability of pension coverage and, conversely, were more likely to have been in jobs where private pensions are not common. They were also less likely to have the long tenure and recent employment necessary for the receipt of pension benefits upon retirement.[12]

Liberalization of the participation and vesting requirements in private plans under ERISA may result in expanded coverage and in higher receipt rates for black workers with shorter tenure and more discontinuous work histories. Greatly expanded coverage of these workers, however, will come only with their movement into jobs where private pensions are prevalent.

Life expectancy raises the opposite issue for blacks as that discussed above for women. No retirement system pays differential benefits

[10] Gayle B. Thompson, "Black-White Differences in Private Pensions: Findings from the Retirement History Study," Social Security Bulletin, vol. 42, No. 2, February 1979.
[11] June O'Neill and Jean Vanski, op. cit.
[12] Gayle B. Thompson, op. cit.

based on life expectancy by race. Since life expectancy for nonwhite males is only 64 years at birth and 72 years for nonwhite females, compared to 69 years at birth for white males and 77 years for white females, the existence of benefit differentials would increase pension benefits for blacks relative to whites. Their absence means that, for workers with a given job history, blacks are subsidizing the pension system for whites.

In the welfare system, State supplementation of SSI produces a significant variation in available benefits, with the lowest payment levels occurring in the States with the highest concentrations of nonwhite recipients. For example, nonwhites account for 35 percent of aged SSI recipients nationwide, but in the jurisdictions with no supplementation of the Federal benefit, the black proportion of the caseload ranges up to 58 percent in Mississippi and 75 percent in the District of Columbia.[13]

4. ARE RETIREMENT BENEFITS FOR PUBLIC SECTOR EMPLOYEES MORE GENEROUS THAN FOR THEIR PRIVATE SECTOR COUNTERPARTS?

Public employee pension plans tend to be more generous than private plans in several respects:

—Work force coverage is more complete.
—Early and disability retirement provisions are more liberal.
—Wage-replacement rates are generally higher; and
—Cost-of-living adjustments occur automatically for Federal retirees, and State/local retirees are more likely to have some degree of automatic inflation protection than are private pension beneficiaries.

If public employee plans are more generous, such generosity may reflect the willingness of legislatures to defer costs to be borne by later generations of taxpayers and to use early retirement options to keep the average age down in the relatively stable State/local work force. While a completely accurate comparison of public and private pensions does not exist, it is claimed by private pension analysts that liberal pension features in government plans force private employers to offer costly liberalizations of their plans to remain competitive for labor.

A realistic private-public comparison is not easy to delineate. First, the range of employees in terms of skill and wage levels is narrower in the public sector, with the private sector including people at both extremes of the skill and wage distribution. Second, most public employees contribute to their pension plans and most private employees do not, so overall compensation must be considered. Third, some public employees do not have social security coverage, so their pensions are not supplementary to social security as private pensions are. Fourth, some private employers also offer profit sharing and other forms of retirement savings which the public sector does not offer. And, of course, the generosity of pensions within the public sector varies a great deal depending on the level of government, the employee category, the size of the government, its tax base, and the degree of employee unionization.

[13] Arthur L. Kahn and Richard A. Bell, "Distribution of Beneficiaries under the SSI Program, by Race, June 1975," Social Security Administration, Research Statistics Note No. 25, Dec. 15, 1976.

5. ARE RETIREES TREATED DIFFERENTLY BY AGE OR COHORT?

Retirement policies and pension rules often treat individuals differently by age or by cohort. Examples include: The mandatory retirement age limit (now 70, raised from 65); the social security retirement test (benefit reductions for postretirement earnings are less after age 65 than before, and do not apply at all after age 72); transitional provisions and old law/new law dichotomies that exist in many pension plans because of the difficulty of uniformly applying changes in laws or rules to all participants. Thus, pension amounts and the amounts of financial gain from work vary by age and create income disparities among subgroups of the aged population.

Transitions in retirement systems create differential effects among younger age groups as well. The most important example of this effect has to do with the costs and benefits of social security to workers at different ages. Workers already retired or near retirement will likely reap much more in benefits relative to the taxes they paid into the system as compared with workers now in their twenties and thirties. This effect results not only from assumptions about future benefits but also from the fact that social security is not a funded system. Since it depends on current taxes, today's taxpayers, who must support a mature system providing income to an aging population, pay more than did their parents, a difference that is not expected to be compensated for by greater retirement benefits when the younger workers retire.

The lack of full inflation protection outside the social security and Federal employee systems creates a particular burden for those who live for quite long periods in retirement. It was shown earlier in this section that a fixed $1,000 pension held for 18 years (the average length of retirement for a woman who retires at age 65) would decline to $416 in real dollars with annual inflation of 5 percent. If she lived for 8 more years to the age of 91, or if she had retired at age 55 and lived the expected 26 years, the $1,000 pension would be worth $281 at time of death. Thus, for those whose retirement income is largely unprotected aganist inflation, achieving a very old age is certain to produce financial hardship unless substaintial assets or intrafamily transfers are available to such individuals.

II. FINANCIAL ISSUES

C. Are Retirement Systems and Pension Plans Adequately Funded?

Future cost increases growing from pressures for more adequate and fairer benefits, unless offset by cost savings, will add to funding problems that are already apparent. The inadequate funding of many pension systems, often disguised in prior years by rapid increases in contributing employees and continued economic growth, has now been exposed for all levels of government, for private pension funds, and for social security as well. A recent example was provided by the United Mine Workers pension fund, which had to curtail benefit payments during the 1977–78 coal miners' strike until the strike ended and contributions to the fund resumed. A study by the Pension Benefit Guaranty Corporation found that 40 private multiemployer plans are in danger of collapse within 5 years, and another 200 are financially

troubled.[14] It is feared that the cost of meeting ERISA's rules may precipitate plan terminations, with the PBGC proving incapable of meeting the liabilities that would result. State and local taxpayer resistance has prompted numerous efforts to curtail the cost of public employee plans. Congress enacted social security tax increases and benefit reductions in 1977 that will greatly reduce, but not eliminate, a projected trust fund deficit, but taxpayer grumbling has already sparked a search for financing alternatives.

The primary funding issues in the three sectors of the pension system are: (1) How to assure the financial integrity of social security; (2) whether or not public employee plans should be fully funded; (3) the degree to which private plans will be able to meet the funding standards required under ERISA; and (4) the financial viability of the PBGC.

1. WHAT MEASURES ARE NEEDED TO ASSURE THE FINANCIAL INTEGRITY OF SOCIAL SECURITY?

The substantial increases in payroll taxes enacted in 1977, together with the "decoupling" of the benefit formula from automatic indexing and other benefit changes, largely erased the deficit that had been projected for the social security trust funds. The 1979 trustees' report for the cash benefit programs indicated a remaining long-run deficit of 1.2 percent of payroll using the intermediate assumptions for economic and demographic trends. (Under the extreme cases projected, the long-range balance could vary from a surplus of 0.89 percent of payroll to a deficit of 4.69 percent.)

To increase payroll taxes by enough to eliminate the projected deficit under the intermediate assumptions would amount to a 0.98 percentage point increase over and above the taxes already legislated (or a 4.48 percentage point increase under the pessimistic assumptions). However, further legislation to curb program costs could meet all or part of the deficit as well. Savings such as those proposed by President Carter in his 1980 budget would contribute to a reduction of the deficit, for example. And consideration of the long-term financing needed by social security must allow for the tremendous impact that relatively small changes in real economic growth, fertility, mortality, or net immigration have on projected revenues and benefits.

Less orthodox approaches to elimination of the deficit that have been discussed recently include:

—Enactment of a new tax, such as a value-added tax, dedicated to social security.

—Greater use of general revenues to pay for benefits within the current system.

—Conversion of the financing of some portion of social security (e.g., medicare or disability benefits) from payroll taxes to general revenues; and

—A restructuring of the entire benefit system, with general revenues providing a base of old-age income through per capita or need-related payments, while payroll taxes pay for a strictly earnings-related retirement benefit.

(These financing alternatives are discussed further in sections D and K.)

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[14] "Multiemployer Study Required by P.L. 95-214," Pension Benefit Guaranty Corporation, July 1, 1978.

2. HOW APPROPRIATE IS FULL FUNDING FOR PUBLIC EMPLOYEE PENSION PLANS?

Pay-as-you-go funding for social security has been widely accepted as a prudent approach, given the Federal Government's ability to modify the economy through fiscal and monetary policy and given the breadth of the tax base that supports social security. For State and local governments, these conditions are not present, or are present in lesser degree; yet many of their pension systems are not advance funded and operate on a current financing basis much like social security.

In recent years, warnings of impending financial problems in public pension systems have been common. Some experts fear that public pension plans may not be able to meet future obligations. They argue that existing pension financing cannot sustain increased benefit payments. Compounding the increased benefit costs is the pay-as-you-go financing system adopted by a large number of governments. Reflecting citizen opposition to increased taxes, this funding concept results in the collection of funds adequate only to pay current beneficiaries. Consequently, much of the ultimate pension cost has been deferred to future generations of taxpayers. As a result of increased pension benefits and pay-as-you-go financing, the amount of unfunded liabilities in public pension plans continues to mount.

A number of factors have combined to cause the retirement costs of State and local governments to escalate rapidly. These factors include: (1) Liberal use of disability retirements; (2) increasingly expensive benefit provisions, particularly early retirement and cost-of-living adjustments; (3) the combined effects of higher-than-expected wage and cost-of-living increases and low rates of real return on pension fund investments; (4) automatic increases in the social security tax rate and wage base; and (5) increasing numbers of retired persons, resulting in growing unfunded costs for those systems that are not fully funded. In addition, a number of State and local governments have moved to amortize their past service liabilities. As a result of these factors, many State and local governments face retirement costs that are escalating more rapidly than other budget items and much more rapidly than revenues from the existing tax structure.

Retirement costs can be especially troublesome for older central cities, which frequently must finance these costs from stagnant tax bases. The fixed nature of pension costs in underfunded systems means that pension expenses can continue to climb long after current employment is cut back and that, in the short-run, there is little budget flexibility regarding pension costs. However, the steps required by full funding (e.g., higher current contributions from local tax revenues) are the very steps that can accelerate deterioration of the local tax base, thus compounding the fundamental difficulties of such jurisdictions.

Understanding of the magnitude of the financial problems associated with State and local pension systems has been limited because of the absence of generally agreed procedures for determining future costs and ascertaining the extent to which such costs should be funded in any given year. Assessment of the liabilities of individual systems made by system actuaries are extremely difficult to relate to one another or to summarize into any generalizations about pension

funding status. Thus, there is little reliable information on how pension funding problems relate to the fiscal problems of individual jurisdictions or to the future fiscal outlook for the State and local sector as a whole.

When the ERISA legislation was passed, there was lengthy discussion of the advisability of including State and local pension systems within its scope. The final resolution of the issue was to exclude public systems, but to have a report on the subject that would provide the basis for later congressional consideration. That report has since been published [15] and a high level of interest in an expanded ERISA continues. While the impact of such legislation would extend beyond full funding (e.g., to vesting and investment policy), the primary impact on the State and local sector could be on the funding of systems and the impact of funding requirements on the financial posture and service levels of State and local governments. Regardless of what is done at the Federal level, funding issues are important to local decisionmakers and to States, which have the power to regulate the pension fund activities of their local governments as well as to exercise direct control over State funds.

3. CAN PRIVATE PENSION PLANS MEET THE NEW FUNDING STANDARDS?

Enactment of ERISA has had three different effects on the funding of private pensions. First, to meet the concerns over funding adequacy, the act requires that defined benefit plans must be systematically funded on a sound actuarial basis. Second, to meet other concerns (e.g., over vesting rules), the act applies standards that increase plan costs and, therefore, the required funding. The third effect of ERISA on funding is that it eliminates much of the flexibility that plans could exercise in the past to meet funding shortfalls through curbs on benefits.

Considerable concern has been expressed since the passage of ERISA over the large number of pension plan terminations and the decline in new plan formations. Critics charge that ERISA is the chief reason for the upsurge in plan terminations, whereas others believe that business and economic conditions are the primary reason. Congress is particularly concerned about the situation since it passed ERISA for the purpose of protecting the interests of participants in private pension plans and their beneficiaries.

Since enactment, there has been a decrease in the annual ratio of new plans to terminated plans. During the 10 years prior to enactment, the average ratio of new plans to terminated plans was about 14.4 to 1. In 1975—the first year after passage—the ratio was 3.7 to 1. During 1976, the ratio had dropped to 1.6 to 1.[16]

While ERISA may have caused a number of plans to terminate, it is important to look beyond the termination statistics. Some employers terminating their plans, for instance, are reportedly converting to other types of employee benefit plans. Furthermore, it could be hypothesized that the worst is over. ERISA may have caused a number of poorer, marginal plans to terminate—precisely the type of plan which led to the enactment of minimum Federal standards. Of equal concern, however, is the drop in the number of new plan formations.

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[15] "Pension Task Force Report on Public Employee Retirement Systems," House Committee on Education and Labor, U.S. Congress, 95th Congress, 2d Session, Mar. 15, 1978.

[16] Ray Schmitt, "Major Issues Facing the Private Pension System," Congressional Research Service, Library of Congress, Jan. 27, 1978.

ERISA established a pension plan termination insurance program under the Pension Benefit Guaranty Corporation (PBGC) to protect workers and retirees against the loss of vested pension benefits in cases where a defined benefit pension plan is terminated with insufficient assets to pay benefits due. The PBGC is entirely self-financing, and termination insurance accounts are kept separately for single and multiemployer plans. Its revenue sources are premiums which it collects for insurance, recoveries of employers' liabilities, and earnings on assets. In addition, the PBGC is authorized to borrow up to $100 million from the U.S. Treasury.

On September 29, 1977, PBGC issued a report, "Potential Multiemployer Plan Liabilities Under Title IV of ERISA," which reflected considerable concern over the magnitude of unfunded vested liabilities in multiemployer pension plans and the consequent potential impact of the termination insurance program. This concern was due largely to extreme uncertainty as to the potential cost of the termination insurance program, and the impact that this program could have on the incidence of terminations, plan creations, and expansions in plan coverage and benefits. The PBGC reported that, of the 2,000 multiemployer plans covered, about 2 percent of such plans covering about 5 percent of multiemployer plan participants were experiencing extreme financial hardship, indicating a high potential for termination within the next 5 years. The aggregate unfunded vested liabilities of these plans in 1977 exceeded $350 million. Another 10 percent of all multiemployer plans, with 15 percent of all participants in such plans, were experiencing extreme financial hardships, indicating a high potential for plan termination, although not necessarily in the near future. These plans currently have aggregate unfunded vested liabilities of about $3.5 billion.

4. IS THE PENSION BENEFIT GUARANTY CORPORATION FINANCIALLY VIABLE?

An important reform of ERISA was the establishment of the PBGC to provide at least partial protection against pension benefits lost due to failed pension plans. The PBGC is an "off-budget" Federal agency, and its operations are intended to be self-financing. As of September 30, 1978, its trust fund assets totaled $438 million, with annual expenses exceeding income by $35 million for fiscal year 1978.

The threat of large multiemployer plans failing as discussed above would present the PBGC with a financial burden it cannot meet as now constituted, thereby undoing the pension benefit protection Congress sought to create under ERISA. Consequently, Congress has delayed until July 1, 1979 the requirement that PBGC begin covering liabilities under terminated plans. If that date remains in effect, it is anticipated that PBGC will not be able to meet the costs involved without raising the multiemployer plans' insurance premium, which could stimulate further plan terminations due to the higher costs imposed on them.

D. How Should the Cost of Providing for Retirement Income Be Shared?

Except for benefits earned under annuity contracts purchased by employees and/or employers, retirement benefits are, in large part, intergenerational transfers from current workers to current retirees, institutionalizing transfers that once took place mainly within families. The extent of these transfers is inversely related to the extent a pension plan is "funded" (i.e., the extent that a reserve fund can cover all accrued pension benefit liabilities). The source of the funds and the nature of the benefit entitlement rules also determine the relative significance of transfer payments within a pension plan. A defined contribution plan funded solely by participants' contributions might involve no transfer aspects. A defined benefit plan funded solely by participants might involve substantial transfers if the benefit formula heavily favored long-term employees, for example.

Social security benefits are almost entirely transfer payments, with current reserves adequate to pay only 4½ months' benefits. The Federal civil service retirement fund can cover 5½ years of benefits, but only 16 percent of annual fund receipts is contributed directly by covered workers. A matching contribution is received by employing agencies, but 45 percent of annual receipts is transferred from general revenues to make up for underfunding. Most State and local plans are also underfunded. Private pension plans vary widely in the extent of fund accumulation to pay future liabilities, although all are required by ERISA to amortize unfunded liabilities over 30 to 40 years.

There are four basic ways in which retirement costs are borne: (1) By the pension plan participant for his or her own future pension entitlement; (2) by plan participants in support of current retirees; (3) by consumers who pay higher prices as some portion of payroll taxes and employer pension contributions are passed on; and (4) by the general taxpayers for costs supported by society as a whole through income taxes. How the financial burden of these savings and transfer payments are allocated among employees, employers, consumers, and taxpayers, how regressive or progressive the costs are relative to ability to pay, and the likelihood that payers will eventually reap corresponding benefits have much to do politically with the aggregate costs society is willing to bear. The choices made will be reflected not only in aggregate financial data but in the individual household's consumption, investment, and work behavior as well.

The choices made on sharing pension costs have many ramifications. For instance, the less the degree of prior funding, the greater the danger that future retirement income may be jeopardized by faulty management planning or unforeseen events (e.g., a decline in an industry's work force, or a prolonged period of slow economic growth). On the other hand, large fund accumulations have significant implications for consumption versus investment activity and for the control of capital markets, the fluidity of capital, and the availability of venture capital.

Furthermore, different sources of funds for income transfers may have different economic impacts as well. A payroll tax or an employer pension contribution is a direct cost of producing a good or service and will add to the cost, and therefore the price, of that product and retard aggregate demand. Transfers funded through income taxes have no such direct link to prices or employment but help determine how governmental fiscal policy affects the economy as a whole.

Three specific issues of current interest bear on how social security costs are shared. These issues have to do with the use of general revenues in social security, the tapping of a new revenue source to support the program, and the question of whether social security benefits should be taxed. (Related matters are discussed in sections I and J with respect to private and public employee pensions, respectively.)

1. SHOULD MORE GENERAL REVENUES BE USED TO SUPPLEMENT SOCIAL SECURITY PAYROLL TAXES?

Several arguments are often heard from advocates of greater general revenue sharing in social security:

—The program is social, not private, insurance and should be supported by all taxpayers as well as by covered employees and employers—such a tripartite sharing is common in European systems.

—Use of general revenues would substitute a progressive for a regressive tax; and

—Substitution of general revenues would result in lower direct costs of hiring and of producing goods and services compared with the alternative of payroll tax increases.

Given the need for greater social security funding (see section C), another argument is that it is easier politically to allocate general revenues to pay for part of social security than it is to increase the payroll tax.

Opponents of general revenues argue that the political support for social security would be damaged if the link between taxes paid and benefits received is weakened. They discount the importance of tax regressivity because the resultant benefits are progressive and because the earned income tax credit mitigates the regressivity for those who are eligible for credits. Opponents also argue that the limitation of the payroll tax is important as a budgetary control over program costs; use of general revenues would not be self-limiting.

2. SHOULD A NEW REVENUE SOURCE (SUCH AS A VALUE-ADDED TAX) BE TAPPED FOR SOCIAL SECURITY?

The search for a new revenue source is to some extent, a search for a way to raise additional revenues that may meet with less resistance than will payroll tax hikes or a diversion of income tax funds. The value-added tax (VAT) may have been suggested in part because of its low visibility to the consumer who ultimately pays it and because of its proven success in numerous countries. There is also an economic reason—some tax experts feel that consumption should be taxed more and investment less to dampen inflation and stimulate saving. Of course, VAT would increase the prices of taxed goods and services in the short run.

As with general revenues, a tax such as VAT would not be linked directly to social security benefits in the minds of the eventual beneficiaries. Furthermore, the incidence of VAT compared to the payroll tax could be even more regressive, depending on which goods and services were taxed and whether there were differences among products in the degree to which final consumers bore the cost of VAT.

3. SHOULD TAX EQUITY BE IMPROVED THROUGH TAXATION OF SOCIAL SECURITY BENEFITS AS INCOME?

Income tax policy applies to social security in an opposite manner than to private pensions. Employees pay tax on the income contributed to social security, but subsequent retirement benefits are not taxed (employers may deduct their share of contributions from taxable income). On the other hand, contributions to private pension plans by both employees and employers and current earnings of pension funds may be nontaxable, but pension benefits are considered taxable income.

It is argued by some that social security benefits should be subject to the income tax to permit a lower net cost to government for the social security system without curbing the benefits of those who need the income the most. This argument is particularly relevant in the context of proposed support for the program from sources other than the payroll tax, since it is presumed that there will be greater pressure to make social security benefits more "efficient" (i.e., targeted more on those most in need) if benefits are being funded from general revenues or a new tax.

E. Do Pension Plans Discourage Saving and Investment?

Efforts to restore the financial integrity of pension systems by building up reserve funds to meet future liabilities will increase the flow of tax dollars, corporate earnings, and private contributions into public trust funds and private pension funds, decreasing the flexibility of funding available for private investments and possibly reducing personal saving.

It has been projected that pension funds will own a majority of American corporate stock by 1985.[17] Unions and governments are increasingly interested in placing restrictions on the flow of capital they control to capture investment funds for socially desirable projects. And the increasing cost of pensions reduces the disposable income available from which an individual can accumulate private savings. Thus, three basic issues are raised: (1) The possible displacement of individual savings; (2) the role of pension funding in determining the aggregate saving rate; and (3) the potential for increasing dominance of institutional investors in the capital markets.

1. WILL RISING PAYROLL TAXES AND PENSION CONTRIBUTIONS DISPLACE INDIVIDUAL SAVING?

The effect of pension plans on saving depends primarily on the extent to which the plans do more than replace intrafamily transfers, the extent to which offsetting early retirement effects are induced, and the

[17] Peter F. Drucker, "Pension Fund 'Socialism'," The Public Interest, No. 42, winter 1976, pp. 3-46.

extent to which dissaving in anticipation of retirement is compensated for by the plan's accumulation of reserve funds. That is, pensions may not add to amounts individuals would have saved anyway, since the knowledge of pension availability may stimulate behavior to reduce saving in other forms by both the individual expecting the pension and the family members that might otherwise have to support him/her in old age.

Until recently, most economists felt that participation in pension plans encourage saving, but the latest studies have contradicted that opinion.[18] It now appears that individuals reduce saving in other forms to compensate for promised pension benefits, although such a substitution effect has not been estimated with any precision, nor is there any reliable study of how this effect may vary with a worker's age.

While not validated empirically, it may be hypothesized that the substitution of accrued pension entitlements for other forms of saving varies directly with:

—The rate of taxation or contributions supporting a pension plan.
—The extent to which a plan's liabilities are funded.
—The generosity of early retirement provisions.
—The generosity with which post-retirement work is treated by the plan; and
—The degree of protection against inflation.

Thus, the greater the feeling of financial security a plan engenders in a participant, either through the plan's promised protection or the leeway it gives the participant to continue working, and the more the required funding reduces a participant's current earnings, the less that participant is likely to save in other forms.

2. WILL GREATER PENSION FUNDING INCREASE THE AGGREGATE RATE OF SAVING?

The Nation as a whole varies its saving and consumption rates from year to year just as individuals do, and it is tempting to speculate that increased pension funding will result in a higher aggregate rate of saving. However, businesses and governments can substitute pension funding for other forms of saving and investment, also as individuals do. Based on past trends, the best evidence available, though far from conclusive, suggests that neither social security not employer pension plans have had a significant net effect on the rate of aggregate saving.[19] Whether this conclusion will change with changes in retirement behavior, inflationary expectations, or increased understanding of pension entitlements by an older and better educated population remains to be seen.

3. DOES THE GROWTH OF PENSION FUND ASSETS ENDANGER CAPITAL MARKET OPERATIONS?

Assets managed by pension plans have grown rapidly in the past and will continue to mushroom as funds are accumulated for the future

[18] The research on pensions and saving is summarized in Alicia H. Munnell, "Research on Macro Effects of Retirement Income Programs," paper presented to HEW workshop on work, income and retirement of the elderly, Mar. 8–9, 1979.
[19] Alicia H. Munnell, op. cit.

retirement of an increasingly aged population. It has been estimated that the assets of private, State, and local plans, which totaled $88 billion in 1961 and $238 billion in 1971, will reach $486 billion in 1981.[20] Continued rapid growth should be expected until early in the 21st century.

Pension plan assets have been concentrated in corporate securities. In 1973, 79 percent of these funds were invested in corporate stocks and bonds. Within the corporate sector, investments have concentrated on the offerings of major corporations (over 90 percent of stocks held are listed on the New York Stock Exchange). Portfolio turnover has been at a fairly slow rate. Thus, it is feared that pension funds have underutilized opportunities for long-range investments in smaller companies or in new enterprises and have helped create a shortage of risk capital. Continued growth in pension fund assets, coupled with a trend toward homogeneity in portfolios, suggest this pattern of influence on the capital markets may become more pronounced.[21]

Another issue of portfolio management that has emerged recently is increased pressure for "socially useful" investment. That is, the investment criteria used by fund managers should take into account the social and political desirability of certain investments. This pressure has been seen with respect to State/local pension funds (to invest in their own governments' public works or in local industries) and union funds (to avoid investment in nonunion businesses). Organized campaigns to deny American investment capital to such countries as South Africa may affect pension managers as well. These emerging pressures raise two issues: (1) The question of the integrity of fund management from the viewpoint of benefits of future pensioners; and (2) the possible introduction of additional inflexibility in the flow of capital in a market increasingly dominated by institutional investors.

In the long run, another concern may arise with respect to the influence of pension funds on the capital markets. That is, as more and more private and State/local plans become fully funded, and as they accumulate funds in anticipation of the retirement of the "baby boom" generation, a rapid liquidation of funds will occur in the next century. As early as 1996 to 2001 for State/local plans, and 2001 to 2006 for private plans, substantial numbers of people born during the 1941–60 period of high fertility will claim pensions. During some part of the first half of the 21st century, there would likely be a net withdrawal of pension funds from the capital markets as liquidations exceed accruals for future liabilities, perhaps resulting in downward pressures on stock prices and rising interest rates. Unless long-term investment planning for the overall economy properly anticipates this period of pension asset liquidation and appropriate investment strategies are followed, an acute capital shortage could occur during that period.

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[20] William C. Greenough and Francis P. King, "Pension Plans and Public Policy," Columbia University Press, New York, 1976, p. 149.
[21] William C. Greenough and Francis P. King, op. cit., pp. 144–152.

F. Will an Aging Population Necessitate an Increase in Government Spending?

Given demographic trends and forecasts, it is easy to see that continuing "business as usual" with respect to retirement policy and health care financing could have an enormous impact on the Federal budget. Already about a quarter of fiscal year 1979 Federal outlays are directly benefiting the aged through social security, medicare, Federal employee retirement, and various welfare programs. If one simply projects these current programs and assumes that overall Federal spending returns to the "historic" level of 20 percent of gross national product (it is at 22.5 percent this year), then the elderly's share of the Federal budget will rise slowly during this century to 32 percent, then leap upward by another 10 percentage points in the next 15 years, and soar to 63 percent by 2025. As a share of labor income, aged benefits will remain fairly stable at 9 to 10 percent until the 2010 "senior boom," the share then rising to 19 percent by 2025.[22]

Two specific issues are discussed below: (1) The controllability of Federal spending in an era of population aging; and (2) the tradeoffs in spending at the Federal versus the State/local levels that population aging implies.

1. Will an Aging Population Promote Less Budgetary Control by Government?

About 75 percent of all Federal spending is classified by OMB as "uncontrollable" because it cannot be modified through the annual appropriations process.[23] Virtually all Federal benefits for the aged, being entitlement programs with benefits adjusted automatically for inflation, are "uncontrollable" in the budget year and account for about a third of "uncontrollable" Federal spending. The cost of these benefits can be controlled through legislation. However, such legislation takes time, particularly when a controversial matter such as the income of the aged is at stake. Thus, Congress can only exert significant budgetary control over the so-called uncontrollable spending through a multiyear effort. In fact, where retirement income is at issue, the time span for real budgetary control is even longer, since reality dictates that career planning by workers and retirement planning by those already on pensions must be taken into account.

As benefits for the aged grow as a share of the budget, they should also account for a larger share of "uncontrollable" outlays, and "uncontrollable" spending should rise to even more than 75 percent of the total. Thus, for Congress to control the size of the budget in any significant way, the legislation required to do so will have to address fiscal policy goals over a longer and longer time span.

Spending on benefits for the aged is primarily determined by:

—Growth in the numbers entitled to social security, medicare, and Federal employee retirement.
—The past earnings of this entitled population.
—The current rate of inflation.
—The program rules for benefit entitlement and computation; and
—Decisions by individuals on when to retire.

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[22] Unpublished projections assembled by Urban Institute staff from an HEW staff study.
[23] "The Budget of the United States Government, Fiscal Year 1980."

The current strength of the economy has only a marginal effect on benefit costs, although it has a sizable impact on the payroll taxes that finance social security, medicare, and civil service retirement. While these programs ordinarily generate revenues in excess of outlays and contribute to a budgetary surplus (or reduction of a deficit), during a recession payroll taxes usually fall off sufficiently to result in a net outflow of funds from these programs' trust funds.

Although an increasing Federal budget relative to GNP is often viewed as a measure of the size of government, an increase in aged benefits, which are mainly transfer payments from workers to nonworkers and from one generation to another, do not generally result in more government control over the production of goods and services as would be true, for example, with a larger defense program or environmental control effort. The one exception to this generalization may be in health care. Certainly the size of medicare expenditures has heightened Federal concern over health services delivery and has stimulated attempts to exercise more public regulation over hospital and physician practices.

2. WILL AN AGING POPULATION SHIFT THE FLOW OF TAX DOLLARS TOWARD FEDERAL INCOME TRANSFER PROGRAMS AND AWAY FROM FEDERAL PROCUREMENT AND SERVICE DELIVERY AND THE STATE/LOCAL SECTOR?

Public spending on aged benefits has become essentially a Federal function, with certain exceptions (State/local employee retirement systems, State supplementation of SSI benefits, State matching of medicaid payments). On the other hand, States and localities continue to provide the bulk of the expenses of public education, they pay close to half the welfare aid to needy families with children, and they operate and share in the costs of employment and training programs, social services, and family health care services.

Since an aging population will increase Federal spending, it may be assumed that a declining proportion of children, youth and younger workers will lessen the demands on State and local budgets. However, with all this budget-making occurring in thousands of disconnected decisions, there can be no assurance that such tradeoffs will be made, although taxpayer efforts to reduce property taxes and growing congressional sentiment to discontinue revenue sharing suggest that this process is already underway to some degree. Since aged dependents cost the public more to support (children relying largely on families for their support), even an explicit tradeoff of less State/local for more Federal spending would not likely hold overall public costs of dependency to the current level.

Within the Federal sector, current trends coupled with a continuation of the Carter administration's goal to hold Federal spending to 20 percent of GNP would mean that Federal procurement programs and direct services provision would have a declining share of the Federal budget and, ultimately in the 21st century, could realize a declining amount of real dollar expenditures. To hold procurement spending constant, or to increase it in real terms, it would be necessary either to relax the ceiling on the share of GNP passing through the Federal budget or to effect cost reductions in aged benefits. The latter course would require changes in benefit entitlement rules, a curbing

of inflation (especially in the health care sector), a major change in past trends toward early retirement, or some combination of these events.

III. EMPLOYMENT ISSUES

G. Should Individuals' Working Lives Extend to Older Ages?

The selection of age 65 as the normal retirement age for social security, for the preponderance of private pension plans, and for a large number of public employee plans, occurred mainly at a time when relatively few people lived to be much older than 65. This policy is now questioned for at least five reasons:

—More and more people should experience good health for long periods past age 65 and will be better able to continue working than was the case 40 years ago.

—Many people want to work longer, or need to work to make up for inadequate retirement income, but have been prohibited from doing so by laws just now amended—future aged workers will not only have broader legal rights to continue work, but their greater levels of education compared to today's retirees and the decreased physical demands of many jobs may stimulate more work activity as well.

—The prospects for a tight labor market if low fertility rates continue calls into question the economic wisdom of encouraging healthy, productive 55-, 62-, or even 65-year-olds to retire.

—The tremendous cost increases associated with the aging of the U.S. population can be offset by a lengthening of the traditional working life. For instance, the ratio of people in dependent age groups (children and the aged) to working age people would be about the same in 2025 as today if the normal retirement age were raised to 70.

—People have been encouraged to retire early (age 62 with actuarial reductions under social security, age 55 with 30 years in the Federal civil service, any age with 20 years of military service, age 55 with 25 years service for white collar employees in New York City), and many people have responded to these incentives (over half the new social security beneficiaries in recent years have retired early). Yet many early "retirees" keep working and continually exert pressure to liberalize the retirement test that reduces social security benefits by 50 cents for each dollar earned over $4,000 yearly.

In addition to the question of the appropriate normal retirement age, the retirement-age issue involves four closely related specific policy issues: (1) Whether encouragement of early retirement should continue; (2) the extent to which social security and pension benefits should be reduced for retirees who resume work, or increased for those who defer retirement past the normal age; (3) whether mandatory retirement should be allowed at any age; and (4) whether the traditional life-cycle model of labor force participation (full-time work followed by full-time leisure) should give way to some other sequencing or mixing of work and leisure over a lifetime?

1. SHOULD ENCOURAGEMENT OF EARLY RETIREMENT CONTINUE?

Social security provides for the election of reduced retirement benefits by an entitled worker as early as age 62. Most private pensions provide an early retirement option, and public employee plans typically provide for optional retirement at earlier ages than do the private plans. If an early retirement benefit is the "actuarial equivalent" of the normal retirement benefit (i.e., its value is less than the normal benefit by an amount that allows for the return on funds invested for the time period involved and the greater chance of dying before the normal age), then there should be no financial incentive to retire early. While benefits in some plans are in fact reduced by amounts that make them actuarially equivalent to benefits at the normal retirement age, the majority of plans actually reward early retirement with benefits greater than the actuarial equivalent of normal benefits.[24] Even social security's 20-percent benefit reduction at age 62 is less than the reduction necessary to achieve a neutral system with respect to retirement age.[25]

This financial encouragement of early retirement began in the Great Depression with the announced intent of making room for employment of younger, unemployed people. This policy has continued through the ensuing decades when larger numbers of young people were entering the labor force. However, we are now entering an era when new entrants will taper off significantly, although early retirement may be viewed as needed to make room for women reentering the labor force and to provide greater flexibility for affirmative action efforts to hire and promote women and minority group workers.

2. SHOULD POSTRETIREMENT WORK BE DISCOURAGED?

For social security beneficiaries who resume work, the retirement test, although liberalized in 1977, still discourages full-time work at a 50-cent rate per dollar earned for all but low-wage workers (who receive further discouragement from welfare benefit rules if on welfare). The main argument in favor of a strong retirement test is that social security's main purpose is to insure against loss of income in retirement and it should not spend its limited resources for a kind of annuity to be claimed at age 62 regardless of work status.

For the worker who defers retirement past age 65, social security does provide a bonus in the benefit paid upon retirement, but the bonus rate (3 percent annually for work between ages 65–72) is far below the rate that would provide actuarial equivalence between deferred benefits and benefits at the normal retirement age. Most private and public employee plans allow no further accrual of pension entitlements for work past the normal age.[26] This financial discouragement to

[24] "1975 Study of Corporate Pension Plans," Bankers Trust Co., New York, 1975.
[25] Richard V. Burkhauser, "An Asset Maximization Approach to Early Social Security Acceptance," Institute for Research on Poverty, University of Wisconsin (Madison), 1977.
[26] "1975 Study of Corporate Pension Plans," Bankers Trust Co., New York, 1975; "Pension Task Force Report on Public Employee Retirement Systems," House Committee on Education and Labor, U.S. Congress, 95th Congress, 2d Session, Mar. 15, 1978.

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continue working is closely related to the policy issue discussed above of inducing early retirement. For private plans, it is also a way of curbing the cost of employing older workers whose marginal product may no longer exceed their marginal cost to the firm.

3. SHOULD MANDATORY RETIREMENT BE PERMITTED?

The mandatory retirement age limit, set at 65 in the original Age Discrimination in Employment Act of 1967, was raised to 70 in the 1978 amendments. Although the act previously allowed mandatory retirement prior to the age 65 limit if such practice were part of a bona fide employee benefit plan, no new plan can contain any arrangement which would force individuals to retire prior to age 70. Collectively bargained benefit plans currently in force with mandatory retirement before age 70 may remain in force until the earlier of two dates—the plan expiration date, or January 1, 1980.

The amendments, however, do permit forced retirement at age 65 for individuals employed as ranking executives or in high policymaking positions if they have been employed in such capacity for at least 2 years prior to reaching age 65 and have, upon retirement, annual pension benefit entitlements on a straight life annuity basis of at least $27,000 per year (excluding social security). Until July 1982, tenured faculty members in institutions of higher education can also be forced to retire at age 65, at which time that exemption will lapse absent extension by Congress.

Past trends of earlier retirement may not have been entirely the result of worker choice but may have been due in part to mandatory retirement rules. The aspects of private and public pension systems discussed above which induce workers to leave the labor force may constitute even more important factors, but without mandatory limits a more gradual transition between work and retirement might be possible, accompanied by a lessening of the psychological, sociological, and economic problems associated with the abrupt change in lifestyle many people experience today. One recent study [26a] has estimated that older workers subject to mandatory retirement are more likely to leave the labor force than are other workers. It was estimated that the increase in the mandatory age to 70 will increase the number of workers ages 62 to 69 by 8 percent. Further research is underway for the U.S. Department of Labor on this question.

A mandatory retirement age constitutes a form of age discrimination which limits the ability of some older persons to continue in their accustomed jobs. Some of them may withdraw from the labor force, depriving the economy of their productive services, depriving the workers and their dependents of an important source of financial support, and raising the costs of pension programs. Others affected by age limits may be forced to find new jobs, often jobs at lower pay that do not fully utilize the skills and experience accumulated over many years of work. Some older workers who are forced to retire may seek work but wind up unemployed and recipients of unemployment benefits. The effects of this loss of productive services on the economy and the related increase in the costs of public and private pension systems fall upon everyone, especially workers.

[26a] Richard F. Wertheimer II and Sheila R. Zedlewski, "The Consequences of Changing the Mandatory Retirement Age Limit," Urban Institute working paper 1284-01, Nov. 24, 1979.

On the other hand, raising or eliminating the mandatory retirement age may affect adversely the opportunities for jobs and promotions for younger workers—especially youth, women, and minorities. One argument claims that there is a fixed number of jobs in the American economy at any given time, and jobs held by older workers are jobs that cannot be held by others. Therefore, a mandatory retirement age directly increases the opportunities for younger workers by creating job vacancies.

A counter argument is that the number of jobs is not fixed. Higher incomes for older workers lead to higher demand for goods and services, and, thus, to a higher overall level of employment. The number of jobs is more a function of the amount of investment capital and the level of aggregate demand than of such institutional limits as the normal retirement age.

Furthermore, it is not clear that older and younger workers are directly competitive for the same jobs to any great extent. Fewer older workers may lead to higher wages for senior positions, rather than to more entry-level jobs. If the increase in labor force participation by older workers is as small as that estimated by Wertheimer and Zedlewski, then the impact on younger workers would be expected to be minor for the economy as a whole.

It is also argued that many older workers experience a decline in productivity as they age. Since it is usually difficult to reduce salaries of senior employees, firms may find it to their economic advantage to substitute younger workers for older workers. A mandatory retirement age provides a convenient way to ease out older workers without the need for case-by-case review and the singling out of particular employees for dismissal.

While the passage of the 1978 ADEA amendments has raised the legal mandatory retirement age to 70 for private sector workers, it falls short of eliminating all age discrimination, and further debate on this subject and the abovementioned issues is expected.

4. IS THE TRADITIONAL LIFE-CYCLE MODEL OF FULL-TIME WORK FOLLOWED BY TOTAL RETIREMENT OBSOLETE?

In recent years, two important trends affecting the employment of the elderly have emerged. First, greater numbers of employees are opting for early retirement. Second, there is an increased desire for part-time work by older people. While related to the above-mentioned three issues, both of these phenomena may be indicative of a more fundamental issue—a desire on the part of workers to reallocate working time versus leisure time across the life cycle. For example, this reallocation may involve decreasing one's hours of work at a younger age together with working for a longer period of one's life. Another possibility is that two careers within a lifetime could become the norm, with periods of sabbatical leave interspersed among the working years in lieu of a permanent withdrawal from the labor force.

Despite the growth in part-time employment as a proportion of total employment (from 8 percent in 1954 to 14 percent in 1977), more and more older people who want to work part time cannot find jobs. Other older workers who are employed do not work the hours they would prefer, being employed either fewer or more hours than they would like. Thus, some older workers must still make the choice between continued full-time employment or complete retirement.

To design effective policies to increase part-time employment opportunities within the private sector, we need to know more about the relative costs to firms of using part-time versus full-time employees in different occupations. The lack of part-time employment opportunities may be an accurate reflection of increased costs to firms, but it may be more the case that employers, without good information, incorrectly believe part-time employees are more expensive than full-time employees. If relative costs are higher, private and/or public policies may be inadvertently increasing the costs of using part-time workers in ways that could be avoided.

A related issue concerns the fact that there also appears to be a lack of part-time employment opportunities for youth and women. Hence, general policies to increase part-time employment opportunities are likely to benefit these groups as well. However, it is possible that an attempt to expand part-time employment opportunities specifically for the elderly would be at the expense of the other two groups. This situation would be likely if the skills and experience of the three groups are similar. Alternatively, it may be the case that the jobs for which elderly workers are best suited do not overlap to a great extent with those being sought by youth and women.

Another consideration is the need for reeducation of the aged to facilitate pursuit of second careers. Institutions of higher education, faced with diminishing numbers of students of normal college age, could be encouraged to design course work to better meet the needs of older workers.

Reallocation of more leisure time from the "retirement years" to the "working years" could also cause a demand for changes in pension plan design, since most private plans compute entitlements using formulas designed with a traditional career pattern in mind (e.g., by setting benefits at a specific percentage per year of full-time work times the average salary for the final 3 years). A person with a longer career that interspersed part-time with full-time work could suffer relative to the 30-year full-time employee who starts total retirement at age 62 or 65, even if total hours worked over their respective careers were equal.

H. Will Critical Labor Market Scarcities and/or Surpluses Result From Present Policies and Trends?

Population aging, retirement policies and pension plans may have aggregate impacts on the labor market in several ways. First, the changing age structure of the population affects the distribution of available skills, with secondary impacts on relative wage levels and extent of labor force participation by various groups. The interplay of rules to coerce or induce retirement with demographic effects on labor supply is of particular interest here. Second, it is often alleged that population aging could lower work force productivity. Third, aging may change patterns of demand for various goods and services. And fourth, pension policies may have aggregate effects on labor supply, distribution and turnover, and unemployment. These issues are discussed below.

1. WILL ANTICIPATED DEMOGRAPHIC CHANGES SHARPLY RESTRICT LABOR SUPPLY?

Given current trends in fertility, mortality, and legal immigration, and the age distribution of the present population, the age structure of the population will shift decidedly in favor of the middle-aged over the next 30 years and the elderly in the longer run. At present, the labor market is being flooded with new entrants from the baby-boom generation and simultaneously receiving substantial increases in women as the female labor force participation rate increases. While the level of labor force participation by young people has reached its peak and will soon be declining rapidly, the labor force participation rate for women of nearly all ages will likely continue rising for some time. On the other hand, older workers have tended to retire earlier and earlier since World War II, and it is unclear whether the increase in the mandatory retirement age limit will affect that trend.

Over the next 30 years, job prospects for older workers choosing to work would seem relatively bright. However, as noted elsewhere, the economic incentives currently embodied in our public and private pension systems discourage them from working. However, by 2020 there will be a dramatic increase in the number of older persons and a substantial risk of heavy competition for jobs.

For the current cohort of younger workers, job prospects are not favorable, since members of this abnormally large cohort will be continually competing with each other for promotions as the cohort ages. For young persons not yet in the labor market, conditions should get progressively more favorable as the succeeding cohorts shrink in size. Shortages of workers for entry level jobs may begin to appear in the late 1980's. However, if the trend toward earlier retirement is reversed, there is the possibility of adverse consequences (probably temporary) for younger workers.

Many of the same effects of demographic change expected for younger workers also apply to a lesser extent to women and minorities. The slowdown of the flow of youth into the labor market and the trend toward earlier retirement will both benefit women and minorities. However, women and minorities compete directly for jobs with youth and older workers only to a limited extent. Moreover, traditionally women have been confined to certain occupations and, thus, largely have competed with each other. As the female labor force participation rate continues to rise, women will face continuing stiff competition for jobs and promotions, unless they break into nontraditional occupations. Black youth face a bleaker future than whites because of the vestiges of discrimination. Attempts to reverse the trend toward earlier retirement could cause adverse consequences for both women and minorities to the extent that they compete for the same jobs.

The combination of an increase in two-earner couples and pension rules which penalize full-time work is likely to lead to a continuing increase in the demand for part-time jobs. One major employer, the Federal Government, has greatly expanded its number of part-time jobs in recent years. However, the extent to which other employers will respond to this demand is not known.

As we have seen above, a shortage of entry-level workers and a surplus of part-time workers are both possible future prospects. Both employers facing a shortage of a particular kind of worker, and workers facing a shortage of a particular kind of job are victims of a structural imbalance in the labor market. To some extent, wage rates will change to equate supply and demand. However, this process does not work well enough to achieve a balance, and the Federal Government has acted to alleviate the imbalances through training and job placement programs. If the preceding analysis is accurate, the future clientele for these programs may be different than today's. Instead of trying to train unskilled youth and place them in skilled positions, the programs may be helping to place women, older workers, and other persons looking for part-time employment into jobs traditionally filled by full-time younger workers. Such a program would probably have to concentrate as much on job restructuring as on training.

Another potential impact of an aging population may be on the productivity of the labor force. Although little is known about this topic, two hypotheses are commonly presented. One is that a more experienced and mature labor force should be more productive. The other is that the labor force will become dominated by people with obsolete skills and with less enthusiasm for training than younger workers.

2. WILL POPULATION AGING CHANGE DRAMATICALLY THE TYPES OF GOODS AND SERVICES DEMANDED BY CONSUMERS?

The impact of an aging population is not restricted to the labor market. It also affects the markets for goods and services. For example, the current housing boom is in part caused by the baby boom generation reaching the age at which they form households of their own. As the impact of the baby boom wanes, it is likely that the housing boom will as well. This may, in turn, have a serious impact on the construction trades. It may also diminish the value of home ownership as a source of wealth in old age if price appreciation slows down.

In addition to housing, certain other impacts can be sketched briefly:

—The demand for educational services for children and young adults will decline rapidly. To some extent this may be offset by more adult education.

—The demand for institutional care facilities will rise steadily throughout this century and rapidly in the second and third decades of the next century.

—The combination of rising female labor force participation and the fact that women from the baby boom cohort are in their child-bearing years will cause at least a temporary upsurge in the demand for child care services.

—The *structure* of demand for many goods and services will change in response to the decrease in average household size associated with low fertility and the aging of the population. For example, the demand for apartments and smaller houses should increase relative to the demand for larger houses. The energy crisis aside, the demand for large automobiles should decline as well.

—The demand for health care services, particularly those provided to the middle-aged and elderly, should rise steadily until the second decade of the next century and then increase dramatically.

All of these changes will affect not only the product markets themselves but also the labor markets for the persons in these industries.

3. DO PENSION POLICIES HAVE EMPLOYMENT IMPACTS?

In addition to changes in labor market conditions brought about by underlying demographic trends, there are effects brought about by government and private policies directly. One of the most important of these is the effect of pension policies.

Although little is known about the magnitude of the effects of public and private pension policies, the direction of the effects is usually clear. First, pension policy discourages labor force participation by older persons. The most important devices which discourage work are the retirement tests employed by social security and private pension systems. These tests make receipt of full pension benefits conditional upon at least partial retirement. In addition, benefit formulas are usually designed to encourage earlier rather than later retirement. Thus, total labor force size is probably reduced, and the elderly labor force is reduced dramatically.

Second, most private pension plans discourage mobility from firm to firm and even more so from industry to industry. Although the passage of ERISA required some protection of the pension rights of workers who change jobs, often these rights are measured in dollars which are not indexed for inflation. Thus, for a younger worker, these "vesting privileges" are nearly worthless since the credits will dwindle in real terms as inflation takes its toll in the intervening years between the earning of the credits and the claiming of benefits. While it is unclear how serious an effect this has on worker mobility, there is no doubt that the effect is to reduce it.

Because older workers are less mobile and, therefore, more likely to stay with a firm until retirement, and then qualify for a substantial pension, they cost a firm more than a younger worker who may earn the same pay but is less likely to finish his/her career at the same firm and, thus, will be entitled to a much smaller pension. This factor may cause firms to favor younger workers over older workers in their hiring decisions.

Another effect of pension policies relates to employee compensation. Some employee groups may have achieved greater levels of total compensation by bargaining for more generous pensions, since the full cost of pension benefits may not be felt for some time, whereas wage increases impact a firm's costs immediately. Where pension coverage varies within an industry, firms may vary in their attractiveness to labor based on their mix of pension benefits versus wage income.

There is also a macroeconomic aspect of the compensation effect of pensions. If the net effect of pension plans has been to raise the level of total compensation compared to what would be paid in wages if pensions did not exist, then pension plans may well have resulted in an increase in the total number of people in the work force.

IV. ISSUES OF SYSTEM COORDINATION AND DESIGN

I. Should the Present Mix of Public and Private Provision for Retirement Income Be Changed?

The original idea behind the Social Security Act of 1935 was that social security would provide minimum income security in old age for as many workers and their families as possible. Private pensions and savings would eventually supplement that base retirement income up to adequate levels. The need for welfare aid to the poor would "wither away" as benefits related to employment matured.[27] However, despite rapid growth in benefits and coverage, neither of these last two goals has been realized fully, and social security has been stretched in two directions, playing an implicit welfare role as well as an explicit retirement role.

Private pension plans were relatively few in number until the 1940's when pension coverage grew rapidly. This growth continued throughout the 1950's. The percentage of the private work force participating in pension plans rose from 12 percent in 1940 to 21 percent in 1950, 32 percent in 1955, and 41 percent in 1960.[28] However, in the 1960's growth in private pension coverage slowed, and, as the participation rate for workers reached 45 percent in 1965, pension analysts were predicting that the number of workers ultimately eligible for private pensions would not reach 50 percent of the work force until well into the 1980's, or even the 1990's.[29] Moreover, there was growing concern during the last half of the 1960's about the equity of various private pension rules and financial abuses in certain plans. Cases of long-time workers being denied benefits due to vesting rules came to light, and financial scandals were attributed to managers of several large funds. The hope that private pensions would ultimately provide adequate retirement income for most workers became less certain.

The changing outlook for private pensions led to legislation in the 1960's and early 1970's to improve the adequacy of retirement income. Beginning in 1965, seven separate social security benefit increases took effect in a 10-year period that yielded a cumulative increase of 120 percent. Adjusting for inflation, these increases, aimed at developing a benefit structure to provide income adequacy, produced a real benefit increase of 48 percent.

At the same time, private pension systems were increasingly regulated toward the same objective. Concern about private pensions ultimately resulted in a major new effort to regulate private pension eligibility and funding under the Employee Retirement Income Security Act of 1974 (ERISA).

Contrary to what many may have expected, the large increases in social security benefits of the late 1960's and early 1970's and the passage of ERISA in 1974 did not signify the beginning of a new era of rising wage-replacement rates approaching adequacy, not even for the 40 to 50 percent of workers covered by private pension plans. Rather, the large increases in real social security benefits marked the end of an era of rapid growth in pension coverage and benefits.

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[27] See William C. Greenough and Francis P. King, op. cit., especially pp. 84–8.

[28] Norman B. Ture and Barbara A. Fields, "The Future of Private Pension Plans," American Enterprise Institute for Public Policy Research, Washington, 1976.

[29] "Public Policy and Private Pension Programs," President's Committee on Corporate Pension Funds and other Private Retirement and Welfare Programs, Washington, January 1965.

While public and private programs were modified and public attitudes toward them shifted, fundamental changes in fertility were also taking place, with major implications for future demographic trends, and expectations for economic growth turned pessimistic. These social and economic changes made the financing mechanisms developed earlier a less viable means of providing promised benefits and led us into a new era of reform and retrenchment. Thus, in 1977 legislation was enacted that reduced the long-range cost of social security, increased the payroll tax, and substantially raised the earnings level to which the payroll tax applies.

Since social security taxes and benefits apply for only a portion of taxable wages, it has been customary for many private pension plans to supplement social security by concentrating contributions and/or benefits above the taxable wage ceiling. Such "integrated" plans must meet certain tests of fairness in order to qualify for tax exemptions under the Internal Revenue Code. The Bankers Trust 1975 study of 271 major pension plans found that 65 percent of them were integrated with social security.[30]

The rapid increase recently enacted in the social security wage base, from $16,500 in 1977 to $40,200 in 1986, will force many of these pension plans to reevaluate the methods used to coordinate their benefits and contributions with those for social security, since social security taxes will apply to total wages for 9 percent more workers in 1986 than in 1977. The rising wage base means that the maximum social security retirement benefit will be much higher in the long run. For example, using constant 1976 dollars and a real economic growth rate of 1.8 percent, the maximum benefit in 1988 will be 1.7 times the 1978 maximum in constant dollars; the maximum in 2008 will be 2.3 times the 1978 maximum, rising to 5.2 times the 1978 maximum by 2035.[31]

The pressures on private pensions—from the rise in earnings covered by social security, the inability of private plans to keep benefits caught up with inflation, the rising cost of pension plan operation under ERISA, and the failure of the public-private system to assure retirees adequate financial protection—suggests the three important issues which are discussed below:

—Future expectations for private pension offerings.
—Future growth in individualized pension arrangements; and
—The future relationship of private pensions to social security.

1. WILL PRIVATE PENSION OFFERINGS LEVEL OFF OR DECLINE?

A decision by a firm or industry to offer its employees participation in a pension plan results from consideration of a number of factors. The fact that pension coverage appears to have leveled off, and the knowledge that private pensions are under pressure from the factors cited above, has prompted considerable interest in what future developments in pension offerings might be. Factors that may determine future pension offerings include:

—The impact of rising social security taxes, benefits and covered earnings, and the automatic inflation adjustment.
—Cost increases associate with ERISA.

[30] "1975 Study of Corporate Pension Plans," Bankers Trust Co., New York, 1975.
[31] Unpublished tabulations prepared by Urban Institute staff.

—Creation of the PBGC by ERISA, permitting financially troubled plans to terminate and have part of the liabilities covered by an insurance pool.
—Union bargaining and the degree to which certain types of pensions have become institutionalized in certain industries.
—The liberalization in mandatory retirement age limits.
—Changes that may occur in tax treatment for pensions.
—Higher rates of inflation, lower real economic growth, and looser labor markets than in the 1960's era of rapid pension plan growth
—The profitability of various classes of firms.
—The popularity of individual retirement accounts (IRA's) as alternatives to formal pension plans.
—Future reliance on profit-sharing plans as a source of retirement income; and
—Trends in public employee plans and their impact on private sector employee expectations and union bargaining.

The ability of pension experts to predict the net result for pension offerings of all these forces is quite limited. In general, however, developments that increase pension costs to employers, that provide employees with greater options for retirement income, or that weaken the institutional and market forces promoting pension offerings will retard future expansion of coverage or even diminish present coverage. Conversely, a potential combination of factors such as tight labor markets, continued encouragement of pensions through tax laws, and a constrained or diminished role for social security could stimulate growth in pension coverage.

2. WILL INDIVIDUALIZED PENSION ARRANGEMENTS PROLIFERATE?

Congress has extended tax privileges similar to those accorded pension plans to retirement plans set up by eligible individuals. Keogh plans are available to self-employed individuals. Individual retirement accounts (IRA's) are available to employees in firms with no pension plan. While there is still a quite restrictive limit on the portion of one's salary that can be put into an IRA or Keogh account, there will likely be pressure to relax the limit over time.

Presently, data are limited on the degree to which persons eligible to establish IRA or Keogh plans have actually done so, the factors that have prompted them to do so, and what the long-term potential of this development may be. The extent to which this avenue is utilized may weigh heavily in firms' future decisions on pension plan terminations or offerings. From the firm's point of view, IRA's avoid the burden of ERISA regulation and solve the problems of vesting and portability. However, the IRA will not serve the function of retaining senior workers and reducing turnover as will a pension plan.

3. WHAT SHOULD THE FUTURE RELATIONSHIP BE BETWEEN PRIVATE PENSIONS AND SOCIAL SECURITY?

It has long been argued by some, particularly organized labor, that social security should be improved to the point that it provides an adequate retirement income to all workers in and of itself, regardless of the level of private pensions available. This argument has been intensified by the effects of inflation on private pension benefits.

These social security advocates base their case on the points that only a Federal system covering most workers can assure a pension that: (1) Reflects a lifetime's work; (2) is adjusted for wage increases while working; (3) is adjusted for price increases while retired; and (4) offers unbroken disability and survivors' protection. They regard private pensions as useful income supplements when available but as unreliable instruments on which to base planning for a financially sound retirement by a whole society, given the varying circumstances in which retirees find themselves.

On the other hand, social security does not cover all earnings for individuals with high salaries; the proportion of earnings covered has varied over the years as Congress adjusted the covered wage ceiling. Thus, private pensions will remain a valuable income supplement so long as some earnings are not covered by social security. Furthermore, the weighted benefit formula for social security results in relatively low wage-replacement rates for retirees from jobs with high salaries, which makes private pensions crucial to achievement of a high replacement rate for those individuals. The existence of a private pension system also builds in a degree of flexibility that a national system cannot sustain with respect to benefit computation, rules of entitlement, and terms of retirement.

Another advantage of retaining a major role for private pensions is that these plans are funded while social security is not. Pension funds assure the Nation of a vast fund of capital for investment; there is no assurance that private savings would be available in the same magnitude if private pension funds ceased to exist.

Advocates of reliance on private sector initiative may argue that the role of social security should be diminished in the future. With some solution to the problems of portability and inflation protection, the private pension system could offer a retirement income more oriented toward recent earnings, with social security more explicitly playing a role of income redistribution and minimum income assurance. One way to diminish the future role of social security under such a restructuring would be to repeal the wage-indexing system for benefit entitlement enacted in 1977. Alternatives considered in 1977 would result in a significantly smaller system and allow the application of the payroll tax to a lower wage base, thereby leaving a bigger role for private pensions in wage replacement and a larger share of income available to businesses and individuals to contribute to pension funds.[32]

Whether or not major shifts occur in the public/private share of pension income, the integration of private plans with social security will still be a short-term issue. Most plans were designed to replace wages at different rates depending on whether an individual's wage is above or below the ceiling on social security coverage. Many such plans are already out of date, in that they have not revised their designs with each change in the social security wage ceiling. However, past changes in the ceiling were not as rapid as those enacted in 1977 to become effective in several stages. This rapid series of increases in the wage ceiling will probably force these plans to redesign their entitlement and/or contribution formulas.

[32] For a discussion of financing alternatives, see "Financing Social Security: Issues for the Short and Long Term," Congressional Budget Office background paper, July 1977.

The rules set by IRS under which this redesign can occur for tax-exempt plans may change as well. In 1978, the Carter administration proposed a change to favor low-wage workers more relative to current law, but no action was taken. Similar proposals may be forthcoming in the future, however.

J. Should Federal Control Be Extended Over Public Employee Retirement Plans?

The development of retirement systems for public employees preceded the 1935 enactment of the Social Security Act. The Federal civil service system was created in 1920 from several earlier plans; numerous State and local employees had their own pension plans prior to 1935; the military retirement system of today, though established after World War II, grew out of older systems of military pensions. When social security was established, Federal workers were not covered (although social security credits were later extended for military service); State/local governments could opt for social security coverage for their employees, but coverage was not mandatory as for private employees. In fact, mandatory coverage of State/local workers may be constitutionally prohibited because it would require State and local governments to pay a tax (the employers' share of the payroll tax) to a Federal trust fund.

Two basic issues raise questions about the need for further Federal intervention in provision of retirement protection for public employees. First, there are questions of equity raised by the existence of retirement systems for Federal and some State/local employees that operate independently of social security but which are financed in large part by the same taxpayers who are required to pay their own social security taxes. The second issue concerns the adequacy, fairness, and dependability of public employee systems and whether they should be regulated under ERISA as private plans are.

1. Should Social Security Coverage Be Universal?

The absence of universal coverage for government workers raises several problems. One major problem is the potential for pyramiding pension benefits by career public employees. Many public employees can retire at an early age, and then, through employment in the private sector, acquire coverage under social security. Such coverage assures an artificially high social security benefit (due to that system's weighting of small amounts of earnings) plus a public pension that is usually based on the last few years of highest earnings. Since movement between the private and public sectors is fairly common, a substantial fraction of former public employees (about 40 percent of U.S. civil service retirees) not covered by social security in their primary careers qualify for both a public pension and social security benefits. This potential for favored treatment is made more controversial by the fact that, in the case of Federal civil servants, 45 percent of civil service retirement is actually paid for by the general taxpayers, employer/employee contributions only providing 31 percent of the necessary funds. (Most of the remaining funds are income from investment of the trust fund assets.)

Congress has taken one step to correct this inequity. In 1977, a Social Security Act amendment provided that a person receiving a spouse's benefit under social security would have that benefit reduced if a public employee pension were also received. In 1979, President Carter proposed that an offset, limited in amount according to benefit amount, be applied against social security benefit payments for all dual beneficiaries of social security and civil service retirement.

Another problem with lack of universal coverage is that gaps in retirement protection have resulted. For example, although retired U.S. workers receive automatic cost-of-living adjustments to their pension amounts, most State and local retirees do not receive full inflation adjustments. Thus, in the jurisdictions that do not have social security coverage, protection of retirees against inflation is often lacking.

Another gap in coverage occurs with respect to disability and survivors' coverage. A person switching between public and private employment may lose disability or survivors' coverage for a period of several years, even if the worker already has earned retirement protection under social security. This gap for disability coverage results from a rule that 20 of the last 40 quarters of work must have been in social security covered employment to receive these auxiliary entitlements. Public employee plans often have similar rules. Thus, a job switcher may wind up with disability or survivors' coverage under neither system, while a person moving between private jobs would at least retain full coverage under social security.

A study of universal coverage options was recently completed by an HEW task force under a congressional mandate.

2. SHOULD FEDERAL REGULATION BE EXTENDED TO PUBLIC EMPLOYEE PLANS?

Two Federal laws have a significant impact on private pensions. The first is the Internal Revenue Code, which exempts from taxation contributions to pension plans and earnings on pension plan assets. A plan must qualify for the exemption by meeting a test of nondiscrimination with respect to employee coverage, rules for variations in benefits by wage level, and the contributions made on behalf of, and/or required of, different employees. Differentials among employees are permitted by IRS, but the allowable differentials are limited and are related to the weighting of benefits by social security in favor of workers with low covered earnings. Thus, these tax code provisions encourage the establishment of private pension plans but affect the manner in which plans define coverage and structure benefits and/or contributions.

The second Federal law significantly affecting private pensions is ERISA. Enacted in 1974 to improve the reliability and adequacy of the private pension system, this act applies Federal standards to plans with respect to vesting rules, funding standards, financial reporting and disclosure, portfolio management and other aspects of plans, including a system of insurance protection for participants in terminated plans. While these rules may be improving pension protection for workers under existing plans, the greater costs imposed by ERISA's requirements may prompt termination of marginal plans and discourage formation of new plans.

Neither of these laws has been extended to public employee plans, but the possibility of doing so is currently at issue. With respect to taxation, public employee plans' contributions and earnings are not now taxed, but IRS has considered applying the same qualifications for tax exemption as are used for private plans. Most public employee plans would not meet that test and thus would be subject to taxation. While State and local governments could not be taxed, plan contributions and earnings could be attributed to the personal income of State and local employees and taxed accordingly. Congress has considered legislating a prohibition against such IRS action.

When ERISA was enacted, extension of its provisions to public employee plans was debated, but instead a congressional study was authorized, with legislation deferred for later consideration. The study by the House Pension Task Force has been completed,[33] and legislation to establish Federal standards for public employee plans has been introduced. A primary concern is the extent to which such standards should deviate from those under ERISA. It might be particularly difficult to apply a requirement for full advance funding of future liabilities to the public plans as now applies to private plans, since most public plans are funded at least partially by a State or local tax levy that the Federal Government may be reluctant to force higher. Another key consideration will be whether Federal standards should apply uniformly without regard to level of government, size of government, or type of employee.

K. Should the Social Insurance Approach to Old Age Income Security Be Revised?

Social security benefits became available to a broad spectrum of people at a time when Federal efforts to alleviate poverty were minimal. There was no Federal aid to low-income, aged, blind, or disabled individuals through SSI, no medicaid or medicare, no food stamps, far less was spent than now on subsidized housing, and federally aided State welfare payments to families were much more limited. Thus, given the widespread financial need and the limited public benefits available, social security was used as a vehicle to reach many low-income people, and the "social insurance approach" of income support, whereby all persons in a given risk group were aided without regard to income, became a popular tool for achievement of social progress for 30 years through the mid-1960's.

However, the "war on poverty" focus of that decade led to a proliferation and expansion of needs-tested benefits that caused renewed questioning of the social welfare tilt that the social security system had acquired over its first 30 years.[34] The fiscal squeeze that became apparent in the 1970's added to the concern that overlaps between welfare programs and welfare-related features of social security should be rationalized to reduce the total amount of tax dollars necessary to assure a given level of minimum income protection throughout society or for selected groups. Also, a reduction in total Federal benefit costs would leave more funds available to individuals and businesses for

[33] "Pension Task Force Report on Public Employee Retirement Systems," House Committee on Education and Labor, U.S. Congress, 95th Congress, 2d Session, Mar. 15, 1978.
[34] For a discussion, see "The Report of the President's Commission on Income Maintenance Programs," Washington, 1969.

private initiatives, including expansion of private savings, pension coverage, or increased pension benefits.

To make social security more purely related to wage replacement raises numerous issues, which are discussed below in relation to options for: (1) More needs-tested aid to the aged; and (2) less needs-tested aid.

1. SHOULD GREATER RELIANCE ON NEEDS-TESTED BENEFITS FOR THE AGED REPLACE PART OF SOCIAL SECURITY?

Replacing with needs-tested benefits the aspects of social security benefits that deviate from the system's original purpose (i.e., provision of individual retirement annuities) would raise a number of problems with respect to both the retirement and welfare systems, such as:

—A social security benefit formula more closely related to past earnings could result in lower wage replacement rates for persons with histories of low earnings, many of whom have low total incomes as well—such a benefit formula would also modify the basic factor upon which private pension plans have based their coordination with social security benefits (i.e., that low-wage workers will have high replacement rates independent of private pension benefits), thereby resulting in a need to restructure private pension plans.

—Individual annuities for women without regard to family status could have deleterious effects on the financial well-being of low-income families where one spouse has had little work experience, unless substantial benefits were credited to homemakers for their unpaid services.

—A trimming of certain welfare aspects of the social security system (e.g., in disability benefits, students' benefits, other survivors' benefits) would adversely impact some needy individuals who would fail to qualify for welfare benefits given the inequities and gaps in existing Federal, State, and local welfare programs.

—Greater reliance on SSI for old age income support would increase an aged person's financial disincentives to work for those who were newly eligible for SSI; and

—Retirees, spouses, widows and widowers younger than age 65 would not be eligible for SSI under present rules.

Other issues raised by greater reliance on welfare aid for income assistance to the aged, even with improvements in SSI, include:

—The philosophical issue of the value to individuals of perceived earned rights under social security versus the social stigma of accepting welfare.

—The past experience of low participation rates for eligible aged individuals in welfare programs; and

—The problem of even more recipients having to cope with the redtape of multiple Federal and State welfare programs, which could be simplified only by sweeping reforms that Congress has so far refused to enact despite recent welfare reform efforts by the Carter administration.

Also, improvements in welfare aid for the aged, blind, and disabled under SSI as part of a reorientation of social security away from

welfare goals would further exacerbate the preferred treatment already accorded those groups compared to other categories of needy individuals and families.

2. SHOULD A SYSTEM OF UNIVERSAL GRANTS FOR THE AGED BE ADOPTED?

One approach that some advocate would permit both a reorientation of social security toward retirement and a reduced need for welfare aid through the establishment of equal grants for each individual over a certain age without regard to past earnings or current need. These "per capita" old age grants would set a basic income floor without the stigma of welfare needs tests and would permit Federal income assurance for the aged independent of the design and financing of social security benefits.

The primary disadvantages of a per capita old age grant are:

—As with social security, these grants would be an expensive way to maintain a floor under income since they would go to people at all income levels, although making the grants taxable and restructuring social security to take the grants into account could greatly reduce the net cost.

—Given the wide disparities in welfare benefit levels, it is unlikely that old age grants would permit elimination of the various programs—rather, some system of State supplements, perhaps with Federal aid, would be needed; and

—Social security beneficiaries too young to receive a per capita grant could experience financial difficulty under a restructured system, given the inadequacy of welfare benefits and coverage already discussed above.

L. How Should Major Changes in Retirement Policies and Benefit Systems Be Implemented?

While transition in public policies is never simple or painless, change relating to policies that affect the economic well-being of people in old age is particularly complex, and how best to make major transitions is an issue in itself.

The enormity of a policy change that impacts the financial affairs of millions of individuals is further complicated in the case of retirement and pension policy by the fact that the financing of one's retirement is a lifelong concern. Also, the fact that every employer, whether public or private, and every union has a stake in retirement policies and pension systems means that change in public policy has ramifications far beyond the relationship between the Federal Government and individual beneficiaries. Thus, in setting an agenda for policy change, it is vital to distinguish clearly those matters that must be handled quickly and how they can be dealt with effectively, recognizing also that most issues, although not necessarily demanding short-run solutions, are often resolved more painlessly if tackled years in advance of the anticipated consequences.

Aside from the political, economic, budgetary or social urgencies that determine short-run priorities, a number of other matters should be considered in changing policy:

—How will different individuals be affected financially over their lifetimes?

—What is the relevant time period over which individual retirement planning usually occurs, or should occur, without disruption by policy change?
—Given that most major policy changes must differentiate among affected individuals by "grandfathering" certain cases under old laws, giving people choices between old and new laws, or providing special transition provisions for certain people, what legal issues arise from such differentiation?
—How quickly can changes in the social security system be implemented from an administrative viewpoint?
—How quickly can public and private employee plans be revised?
—How will individual behavior in work and saving be modified in adjusting to changes in policy?
—How will employers' pension offerings be adjusted under new policies?
—How long will it take to realize the positive achievements that are the goal of a policy change?

These considerations suggest that choosing the right times and priorities for political resolution of policy issues and the best means of transition may be equally as important as any other aspect of deliberations over aged income and employment policies.

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Chapter 2

THE ECONOMIC IMPACTS OF AN AGING POPULATION: A REVIEW OF SIGNIFICANT FINDINGS

The aging of the U.S. population now in process is a phenomenon that is well known and widely discussed. Presented here is a review of the literature on the economic effects of that societal aging process. The view one gains from this review is uneven in its detail. Some economic aspects of aging (e.g., the financial consequences for the social security system) have been throughly analyzed, other topics have been studied but with inconclusive results (e.g., retirement behavior and future labor supply of the elderly), and still other subjects have seen little research (e.g., the overall public finance implications of aging).

This chapter addresses the economic impacts of an aging population and presents significant findings organized around five major topics: (1) Employment; (2) income, consumption and wealth; (3) fiscal impact; (4) pension plans and financial markets; and (5) migration and regional development. The distinction is thus drawn between the economic impacts of the aging of individuals versus the "aging" of a population through a shift in its distribution by age. We will concern ourselves with the latter situation. Thus, for example, we shall not discuss the economic impact on an individual of his or her transition from worker to retiree but instead address the aggregate effects of an increasing proportion of individuals moving from worker to retired status.

The aging of a population can be measured in various ways: (1) By an increase in the median age; (2) by an increase in the absolute number of elderly individuals; or (3) by an increase in the proportion of aged [1] to the total population. Regardless of the criterion utilized, the U.S. population will age over the coming decades into the early part of the next century.

In 1976, the median age in the United States was 29 years; however, by the year 2020, the median age is projected to be 37.[2] As table 1 demonstrates, the absolute numbers of elderly persons will rise so that by the year 2030, there will be 55 million elderly, double the number in 1977.[3] The proportion of elderly in the total population will also increase steadily, reaching a peak of 18.3 percent in the year 2030.

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[1] Throughout this chapter we will generally define the aged as those age 65 or older. However, in some cases, such as the pensioners who retired prior to age 65, a less rigid definition of aged may be utilized.

[2] U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 704, "Projections of the Population of the United States: 1977 to 2050," U.S. GPO, Washington, D.C., 1977, table 1, p. 14. (Series II projection quoted. Series I places the median age at 31.4 and series III at 41.7. The differences are due mainly to differing assumptions regarding future fertility rates).

[3] This can be stated with a great degree of certainty since the persons who will be 65 or older in the year 2030 are already alive. The projection of these cohorts relies mainly upon assumptions of mortality rates and net immigration rates. These two factors are less volatile than the third factor which influences demographic estimates, viz, future fertility rates.

TABLE 1.—ELDERLY POPULATION, 1977–2050

	Total population (in thousands)	Population age 65 plus (in thousands)	Percent of total
1977	216,745	23,431	10.8
1980	222,159	24,927	11.2
1990	243,513	29,824	12.2
2000	260,378	31,822	12.2
2010	275,335	34,837	12.6
2020	296,115	45,102	15.5
2030	300,349	55,024	18.3
2040	308,400	54,925	17.8
2050	315,622	55,494	17.6

Source: Current Population Reports, series P-25, No. 704 (1977). Compiled from tables 8 and 11. Series II projections.

To understand the economic impacts of this population aging, it is useful to examine the dynamic determinants of the aging process. A population which ages because of age-related changes in mortality rates, for example, may be quite different from a population which ages as a result of declining fertility rates, and the resultant population compositions would in turn exert different economic impacts. Therefore, the next section discusses the components of population change and their relative contribution to the projected aging of the U.S. population.

The Determinants of Age Structure Change

The age composition of any given population is determined by mortality rates, net immigration rates and fertility rates. The significance of each of these factors in the projected aging of the population is discussed below.

MORTALITY

While mortality rate reduction played a major role in the determination of population growth during the 19th and early 20th centuries, its relative influence has diminished since then. At the start of the 20th century, 35 percent of white and 58 percent of nonwhite female infants died before attaining age 45. By the mid-20th century, however, mortality rates had undergone a significant decline. In 1900, death rates per 1,000 population were 17 for whites and 25 for nonwhites. By 1960, comparable rates were 9.5 for whites and 10.1 for nonwhites (Taeuber, 1972). Advances in sanitation and medical techniques, as well as increased levels of education and income have all contributed to declining mortality rates, so that by 1975, the crude death rate was 8.9 per 1,000, the lowest rate in U.S. history.[4] Death rates for the middle and older age groups declined significantly in the 1973–75 period due largely to a reduction in deaths from cardiovascular diseases.[5] By 1977, life expectancy at birth had increased to 69.1 for males and 77 for females.[6] Based on recent research on future

[4] U.S. Bureau of the Census, Current Population Reports, series P-25, No. 706, "Estimates of the Population of the United States and Components of Change: 1940 to 1976," U.S. GPO, Washington, D.C., 1977, p. 2.

[5] National Center for Health Statistics, Monthly Vital Statistics Report, vol. 24, No. 13, June 1976, tables 8 and 9.

[6] Bureau of the Census, Current Population Reports, series P-25, No. 704, "Projections of the Population of the United States: 1977 to 2050," U.S. GPO, Washington, D.C., 1977, p. 1.

trends in mortality,[7] average life expectancy at birth is estimated to be 71.8 years for males and 81 years for females in the year 2020. However, further reductions in mortality rates are expected to be quite small, and therefore mortality will exert relatively little influence over projected changes in the demographic composition of the population.[8] Estimates cited by Jacob Siegel, for example, indicate that complete elimination of cancer mortality would only add 2.5 years to life expectancy at birth (Siegel, 1978).

IMMIGRATION

Net immigration has historically been a major contributor to U.S. population growth. Recently, however, legal immigration has been strictly controlled and has little impact on demographic structure (Taeuber, 1972). While net civilian immigration rates have remained relatively stable since 1950, larger percentages of the net change in population have been attributable to new immigration as a result of falling birth rates. Net civilian immigration was estimated to be 327,000 in 1976, or 1.5 per 1,000 population.[9] Such estimates do not include temporary workers, foreign students, exchange aliens, and illegal residents (Keely, 1972). The Immigration and Naturalization Service apprehended over 800,000 illegal aliens in 1976, almost two and one-half times the number of legal entrants. Estimates of the total number of illegal immigrants present in the country vary widely, with some setting the number at two to four times the number of apprehensions. Lack of reliable data regarding the total number and demographic characteristics of the illegal alien population precludes speculation as to how this group affects the current or future demographic composition of the total population. Population projections published by the Census Bureau generally set net immigration at 400,000 per year, reflecting the observed trends in legal immigration over the last 5 years.[10] However, the degree of accuracy of this estimate and the true impact of immigration upon the demographic composition of the population remain unclear.

FERTILITY

Most of the fluctuation in post-World War II population growth can be explained by fluctuating birth rates. The total fertility rate in 1957 was 3,760; by 1976, it had decreased to 1,760.[11] It is this decline in the birth rate coupled with the high fertility rates of the past which will result in increased proportions of elderly persons in the population. The "baby boom" population born after World War II will attain age 65 in the early part of the next century; the high fertility rate of 1957 which resulted in large numbers of young dependents will translate into large numbers of old dependents in the

[7] Social Security Administration, Office of the Actuary, "United States Population Projections for OASDHI Cost Estimates," actuarial study No. 76, June 1977.

[8] For a discussion of studies which predict further declines in mortality rates, see Harold Sheppard and Sara Rix, "The Graying of Working America," New York, Free Press, 1977.

[9] Current Population Reports, P-25, No. 706, p. 2.

[10] Keely argues that no trend is discernible. He states that insufficient time has elapsed since recent changes to immigration laws for a true pattern to emerge.

[11] The total fertility rate is the number of births that 1,000 women would have in their lifetime if, at each year of childbearing age, they experienced the birth rates occurring in the specified calendar year. Current Population Reports, P-25, No. 706, p. 1.

year 2022. Should low fertility rates prevail over the coming decades,[12] the proportion of the elderly could reach 22 percent of the total population by the year 2030.[13]

The economic impacts which will be experienced as a result of these demographic shifts depend upon more than the absolute or relative increase in elderly persons. Since the elderly are not a homogeneous group, the nature of the economic impacts will be determined in part by the characteristics of the elderly population. The following section discusses the socioeconomic composition of the future aged.

Socioeconomic Composition of the Elderly Population in the 21st Century

The relative economic impacts of the increasing proportion of elderly persons will be shaped by various characteristics including age, race, sex, living arrangements, and labor force participation patterns. In general, the subgroups of the elderly who will be growing most rapidly are precisely those whom in the past have been most disadvantaged: the very old, nonwhites, and females.

THE VERY OLD

Within the context of population aging lies another observable trend—the aging of the elderly population itself. While the elderly will comprise a greater proportion of the total future population, the very old—those age 75 or over—will comprise a greater proportion of the elderly (until the large influx of new 65-year-olds begins in 2006). Table 2 shows this shifting age structure for those age 65 or older.

TABLE 2.—AGE STRUCTURE OF THE ELDERLY POPULATION, 1977-2030

	Age 75 plus			Age 65 to 74			Age 75 to 84			Age 85 plus		
	Population (thousands)	Percent total population	Percent population 65 plus	Population (thousands)	Percent total population	Percent population 65 plus	Population (thousands)	Percent total population	Percent population 65 plus	Population (thousands)	Percent total population	Percent population 65 plus
1977	8,853	4.07	37.7	14,577	6.72	62.2	6,813	3.13	29.1	2,040	0.94	8.7
2000	14,386	5.52	45.2	17,436	6.69	54.7	10,630	4.08	33.4	3,756	1.44	11.8
2010	15,420	5.46	44.2	19,776	7.18	56.7	10,845	3.80	31.1	4,575	1.66	13.1
2020	16,975	5.84	37.6	28,128	9.69	62.3	12,199	4.20	27.0	4,776	1.64	10.6
2030	23,170	7.71	42.1	31,853	10.6	57.9	17,489	5.82	31.8	5,681	1.89	10.3

Source: Current population reports, P-25, No. 704, tables 8 and 11, series II projections.

As table 2 indicates, the proportion of the population age 75 or older is projected to rise from 4.07 percent in 1977 to 7.71 percent by 2030, and the proportion of the elderly who are 75 or older will reach 45 percent by 2000. The proportion aged 85 or older will double, from less than 1 percent to almost 2 percent, and 12 percent of the elderly will be age 85 or older in 2000. Greater proportions of the very old among the elderly can be expected to influence the economic impacts of population aging. The very old are more likely to be in ill health, are more limited in their mobility, and generally have lower incomes.

[12] The Bureau of the Census publishes three series of population projections. Series I reflects an average number of lifetime births per woman of 2.7, series II reflects average births of 2.1, and series III assumes 1.7 births per woman.

[13] Current Population Reports, P-25, No. 704, series III projection, table 12, p. 71.

In 1970, 1.4 percent of those aged 65 to 74 resided in nursing homes, compared to 8.1 percent of those aged 75 or older.[14] The older subgroups also experienced longer stays in nursing homes. Those age 65 to 74 experienced 4,397 nursing home days per 1,000 persons in 1973–74; those age 75 to 84 spent 21,485 days; and those age 85 and over spent 86,364 days in nursing homes per 1,000 persons (Kovar, 1977). Approximately 57 percent of the cost of this nursing home care was financed by public programs, with the remainder privately financed. In fiscal year 1977, nursing home care for those age 65 and over cost an estimated $10.5 billion, or $446 per capita. The higher utilization rates and longer stays experienced by those age 75 and above would translate into an even higher per capita cost (Gibson and Fisher, 1979). In addition, the very old who reside outside of institutions require relatively more services to help them function in a community setting. This is due partially to the problems associated with advanced age and partially to the fact that a high percentage of the very old live alone (approximately 35 percent in 1975).

The very old are also more likely to be economically deprived. Approximately 17 percent of all persons age 72 and above had incomes below the poverty level in 1975. The overwhelming majority of these elderly poor received all their money income from social security benefits or other transfer payments.[15] Thus, the aging of the elderly population is a significant trend which will affect the magnitude and direction of economic impacts.

THE MINORITY ELDERLY

The racial composition of the elderly population will also affect the nature of economic impacts. In 1977, nonwhites comprised 9.25 percent of the total population age 65 or over; by the year 2000, nonwhites are projected to comprise 11.5 percent of the elderly population.[16]

The nonwhite population is projected to grow in number about 300 percent by 2035 (as compared to 115 percent for all races). These differing growth rates will cause the proportion of nonwhites in the elderly population to increase from one-tenth in 1978 to one-sixth in 2035 (Fowles, 1978).

The nonwhite elderly population has been more economically disadvantaged than the elderly population in general. Abbott pointed out that in 1972, black elderly units were less likely than whites to have social security benefits, other public or private pension benefits, or income from assets (Abbott, 1977). Thompson also reported that black workers were less likely than whites to have been covered by a pension on their longest job. In addition, those blacks who were covered were less likely to receive benefits (Thompson, 1979). The 1974 median income for families headed by a 65-year-old was $7,519 for whites and $4,909 for blacks. While only a small percentage of the elderly were dependent upon public assistance payments, a large percentage of the black elderly were dependent upon such transfers.

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[14] U.S. Bureau of the Census. Census of Population: 1960, Final Report PC(2)-8A, Inmates of Institutions, table 7.
[15] U.S. Bureau of the Census. Current Population Reports, series P-60, No. 106, "Characteristics of the Population Below the Poverty Level: 1975," U.S. GPO, Washington, D.C., 1977, table 15.
[16] Current Population Reports, P-25, No. 704, table 8.

Abbott has noted that numerous studies of the income status of the aged treat the aged as a homogeneous group and ignore the comparatively disadvantaged situation of the black elderly. Unless the relative economic position of whites versus nonwhites improves in the coming decade, the increasing proportion of blacks in the elderly population will significantly affect the economic impacts of population aging.

AGED WOMEN

Females constitute the final subgroup of the elderly which will be experiencing high growth rates. Women now constitute a greater proportion of the elderly than in the past. In 1975, there were only 69 males for every 100 females age 65 and over in the United States. It is anticipated that this ratio will fall until the year 2000 and then begin to rise again, reaching 68 males for every 100 females in the year 2030.[17] Women also have greater life expectancies than men, so that white women who were 60 years old in 1975 could expect to live an additional 22 years, about 5 years longer than white men of the same age (Fowles, 1978). Thus, women will likely make up a proportion of the very old population.

Elderly women are more likely to experience poverty than men. Over 18 percent of women age 65 and over had incomes below the poverty level in 1975, compared with 12 percent for elderly men. More significantly, women comprised over 69 percent of the aged poverty population in 1975 (over 72 percent of the poverty population age 72 and over).[18]

Elderly women are far more likely to live alone than are elderly men and are thus more likely to require supportive services. In 1975, 40.3 percent of all women age 65 and over lived alone, compared to 14.9 percent for men in the same age group. The likelihood of being widowed (and therefore the likelihood of living alone) increased with age. Thirty-nine percent of all women age 65 to 71 in 1975 were widowed, while 65 percent age 72 and above were widowed. One-quarter of these very old widows had income below the poverty level.[19] In addition, widows constituted over half the nursing home population and three-fourths of all elderly women in such institutions (Fowles, 1978).

It is possible that the current and projected high female labor force participation rates, future improvements in private pension coverage, and future social security reforms providing more equitable treatment of women will ameliorate the relative position of the future female elderly. However, at the present time, it should be noted that an increasing proportion of females in the elderly population will influence the degree of the economic impacts of population aging.

DEPENDENCY RATES

Two remaining factors which will greatly influence the degree of economic impacts—living arrangements and labor force participation—will be discussed within the context of dependency ratios. These ratios provide a meaningful framework within which the impacts of

[17] Current Population Reports, P-23, No. 59, p. 12 and p. 25, No. 704, table 11.
[18] Current Population Reports, P-60, No. 106, p. 79.
[19] Ibid.

future trends in living arrangements and labor force participation rates can be examined.

Traditionally, the "dependent-age" population has been defined as those under 18 or 21 and those age 65 and over. The definition reflects the idea that persons in these age groups are not expected to be members of the labor force and are therefore noncontributors to the productive sector of the population. These groups, therefore, are considered "dependents" of the productive-age population. With regard to the elderly, the economic burden for their support rests on later generations; thus the dependency ratio (number of elderly to number of productive-age persons) is of prime importance. For example, pay-as-you-go pension programs, such as social security, must respond to changing dependency ratios if they are to retain their current structure and future solvency.

The first type of dependency ratio which will be examined is the familial dependency ratio. This measure is a type of "fertility rate in reverse" in that it relates parents to children rather than children to parents in determining the level of support which the elderly can expect from their children.[20] Such ratios relate the number of persons age 65 to 84 to the number of their children age 45 to 49 to illustrate intergenerational familial age-dependency ratios.[21] In 1975, this ratio was 174; in 2020, the ratio is projected to reach 235.

Familial dependency can also be reflected in living arrangements and intergenerational transfers of income from the young to the elderly. Nonmonetary transfers of resources within extended family relationships constitute the principal source of direct assistance to the elderly by relatives.[22]

The extended family concept has been declining in popularity over the last few decades. Increasing numbers of elderly individuals have been maintaining their own households, living alone or with nonrelatives. About 15 percent of elderly men and 37 percent of elderly women maintained their own households in 1975.[23] This trend may continue into the future when the elderly have fewer children to call upon for support.[24] Rosenheim has suggested that government programs have replaced family responsibilities, altering the patterns of family relationships (Rosenheim, 1965). Should such trends persist, the relative "burden" of providing assistance to the elderly would increasingly shift from the family to the society in general.

Society's "burden" of providing assistance to the elderly is examined through the societal dependency ratio. Societal dependency is of greater importance for the older nonworking group than for the younger dependent group for three reasons (Clark and Spengler). First, much of the expenditures on young dependents takes the form of human capital-building (e.g., schooling, training) which improves

[20] Current Population Reports, P-23, No. 59, p. 55.
[21] Ibid.
[22] The Urban Institute, "Income Adequacy and the Elderly: Priority Research Issues," Mar. 31, 1977, p. 183.
[23] Current Population Reports, P-23, No. 59, p. 49.
[24] Robert Butler, head of the National Institute of Aging, summarizes this point in his statement: "My wife and I will be in good shape, because we were explosive. We had four children; we lost one, but we have three. So, presumably, if they retain their health, when we get into our old age, we'll have three children to call upon. For the post-World War II generation there won't be as many children." Quoted in R. J. Samuelson, "Aging America—Who Will Shoulder the Growing Burden?" National Journal, Oct. 28, 1978, vol. 10, No. 43, p. 1712.

their future productivity and usefulness to society. However, expenditures for elderly dependents largely fulfill a maintenance-type function and are not recouped later by society in the form of increased human capital. Therefore, Clark and Spengler argue that a reallocation of resources toward older dependents may lower the future rate of economic growth (Hogan, 1974). Second, a significant change in the relative spending on younger versus older dependents will involve a shift in expenditures by level of government, since expenditures for youths are primarily undertaken by families and State and local governments while expenditures for the elderly are undertaken primarily at the Federal level. Third, they further point out that government expenditures for older dependents are three times larger than those for youths. Thus, the dependency ratio for the elderly population is of crucial importance in determining the economic impact of a growing proportion of elderly.

The dependency ratio is by definition based upon labor force participation since it is designed to measure the ratio of nonworkers to workers. The ratio will differ, therefore, based upon both the relative size of the elderly and working-age populations and the work patterns of those groups—the ages at which persons enter the labor force and withdraw from it.

Since World War II, the age of entry into the labor force has risen while the age of exit has fallen. The overall rate of labor force participation has remained relatively stable, however because the decline in male participation has been offset by female participation (Spengler, 1978).

Only one-fifth of the men and one-twelfth of the women above age 65 were in the labor force in any given month of 1975. Moreover, 42 percent of men and 52 percent of women in the labor force voluntarily worked part time. Coupled with this trend of withdrawal from the labor force after age 65 are the trends toward early retirement and increased years of schooling (Bixby, 1976 and Kreps and Clark, 1975).

Rejda and Shepler state that a future retirement age of 60 is a more reasonable assumption than 65 and that age 20 should be used as the labor force entry point to reflect a greater incidence of college attendance. Based on these assumptions, they estimate that the ratio of those age 60 and over to the population ages 20 to 59 will be .420 in the year 2050 (Rejda and Shepler, 1973).

A comparision of dependency ratios reflecting different labor force entry and exit ages is presented in table 3. The first measure assumes an entry age of 18 and retirement age of 65; the second assumes an entry at age 20 and withdrawal at age 60. The third measure assumes retirement at age 65 and incorporates labor force participation rates that differ by sex. Men are assumed to work from age 20 to 64 while women enter the labor force after the peak child-bearing age and withdraw earlier at age 60. The impact of labor force participation is clearly illustrated in this table. With a working population age 18 to 64, it is projected that there will be 29 nonworkers for every 100 workers in the year 2030. Delayed entry for both sexes and early retirement for females increases this ratio to 39 retirees for every 100 workers.

TABLE 3.—PROJECTED DEPENDENCY RATIOS UNDER DIFFERENT LABOR FORCE PARTICIPATION ASSUMPTIONS, 1975–2030

	(Population 65 plus)+ (population 18 to 64)	(Population 60 plus)+ (population 20 to 59)	(Population 65 plus)+ (males 20 to 64 and females 35 to 59)
1975	0.18	0.25	0.26
1980	.18	.25	.26
1990	.19	.30	.27
2000	.19	.28	.25
2010	.19	.32	.26
2020	.24	.40	.33
2030	.29	.44	.39

Source: Current Population Reports, P–23, No. 59, p. 56.

Delayed entry and early retirement at age 60 increases the ratio even further to a projected 44 nonworkers for every 100 workers in the year 2030. The trend toward early retirement, or decreased labor force participation of the elderly, will obviously exert a significant influence over the economic impacts of population aging.

I. THE IMPACT OF POPULATION AGING ON EMPLOYMENT

A. Size and Composition of the Labor Force

1. PROJECTIONS

As indicated in the preceding discussion of dependency ratios, a most significant impact of an aging population is its effects on the size and composition of the labor force. While several studies have presented labor force projections to the year 1990—see Flaim and Fullerton (1978), Johnston (1973), and Smith (1979)—few have extended these projections into the 21st century.[25] In addition, many of the 1990 projections have been criticized—see Rosenblum (1972), Sum (1977), Ryscavage (1979), and Taeuber (1976)—since projections of labor force participation rates were overestimated for males and underestimated for females.

[Note: See end of this chapter for complete description of references.]

Johnston (1976) presents two projections of the labor force to the year 2040 based on the differing fertility rate assumptions of census series B and E population projections and varying labor force participation rates. The first projection assumes a norm of three children per family and total labor force rates of 78.6 percent for males and 47.7 percent for females. The second projection is based on 2.11 children per family and total labor force rates of 74.8 percent for males and 45.5 percent for females.

Under the first assumption, the total labor force grows from 101,096,000 in 1980 to 255,312,000 by 2040, an increase of 252 percent over the 60-year period. The rate of growth is steady, with increases ranging between 35 and 37 percent for each 20-year period.

Under the second assumption of replacement rate fertility levels, the labor force increases from 102,818,000 persons in 1980 to 147,724,000 in 2040, an increase of 43.6 percent. Under this scenario, the rate of increase rapidly declines. The size of the labor force grows by 23 percent in the period 1980 to 2000 and then halves its rate of increase

[25] Everyone (except future immigrants) in the 1990 working-age population had already been born by 1974. Therefore projections of the labor force to 1990 are based upon completed (and hence observable) fertility rates. Projections much beyond 1990 necessitate development of fertility rate projections.

to 11 percent from 2000 to 2020, reaching 141,138,000. Over the succeeding two decades the rate halves again to 4.6 percent. Thus, if replacement level fertility rates continue into the next century, the labor force will grow at a continuously decreasing rate, growing in size by less than 50 percent over the next six decades.

The age composition of the labor force also varies under these two scenarios. Under series B, 14.3 percent of the total labor force would be age 55 and older in the year 2040, while under series E, 18.7 percent would fall into that age backet. The contrast is more striking during the period 2000 to 2020. The high fertility rate projections show 17 percent of the increase in the labor force attributable to those aged 16 to 24, and 21 percent attributable to those age 55 and over, while the lower fertility rate projections show less than 2 percent of the labor force growth attributable to the younger group, and 72 percent attributable to the older group. Series B projects that 2.1 percent of the labor force would be age 65 and over in the year 2040, while series E projects 3.3 percent.

Serow (1975) presents a slightly different age distribution of the male labor force in the year 2020. Using the census series E projections, he predicts a total male labor force of 81.2 million (compared to Johnston's 85.5 million), with 17.6 percent falling into the 55 to 64 age bracket (compared to Johnston's 16.2 percent). Serow excludes the aged, examining only those males aged 20 to 64.

However, given the larger proportion of elderly in the population, the size and composition of the labor force will depend heavily upon the labor force patterns of the over-65 age group. Johnston predicts labor force rates in the year 2040 of 14.6 for males age 65 and over and 6.7 for females.[28] This contrasts with actual 1960 rates of 32.2 percent for elderly males and 10.5 percent for females.

The proportion of men aged 55 to 64 who were out of the labor force reached 19.5 percent in 1972; the proportion of men age 65 to 69 working at some time during a year has recently declined to less than half. In recent years, about half the men and two-thirds of the women who have become retired-worker social security beneficiaries have done so under early retirement provisions—see Bixby (1976) and Schwab (1974). In addition, indications are that among these early retirees relatively few could be induced to return to work (Motley, 1978). Thus, the recent trend has been toward reduced labor force participation among the 65 to 69 age group and increased withdrawal from the labor force for the pre-65 age group.

Despite these trends, the projected decline in growth of the labor force, coupled with high rates of inflation, the uncertainties of pension programs and the concomitant increased importance of earnings as a source of retirement income might result in a reversal of this trend. This reversal, however, would be dependent upon the relative significance of such factors in the overall retirement decision. The following section, therefore, examines the literature on the labor supply of the elderly.

2. RETIREMENT BEHAVIOR

The factors which appear to influence the labor supply of the elderly include health, pension coverage and receipt, firms' retirement policies, aggregate economic factors, other socioeconomic factors at the family

[28] Series E projections.

level, and job characteristics. Those which seem to exert the greatest influence on the retirement decision based on past studies are health and social security benefits. However, no consensus exists as to the relative significance of the other contributing factors.

Barfield and Morgan (1970), utilizing a national survey and a survey of United Auto Workers covered by an early retirement plan, found that subjective evaluation of health, expected retirement income and attitudes toward job and retirement were the most influential factors in decisions to retire prior to age 65. Barfield (1970), using a reinterview survey of the retired auto workers, found retirement income to be the most important factor in the retirement decision, with all other factors playing a secondary role.

Parnes and Nestel (1975) analyzed early retirement among males age 50 to 64 and stated that early retirees could be dichotomized into those for whom early retirement is truly voluntary and those who are forced out of the labor force by ill health. Their analysis excluded data on expected social security or pension benefits.

Boskin (1977), utilizing a longitudinal sample of 131 males, found that social security benefits and the social security earnings test exert the most significant influence over early retirement decisions, with net earnings also playing a significant role. He also found that health status does not influence the decision. In fact, ill health was found to have a positive, although insignificant, effect upon the early retirement decision. However, Boskin admits that his measurement of health status does not provide a precise estimator. Boskin and Hurd (1977), using Retirement History Survey data, found that social security benefits and assets exert a significant influence upon labor force withdrawal. They also conclude that workers who state that they have health limitations are more likely to retire than those who do not.

Quinn (1977, 1978a, 1978b), in a 1977 analysis of data from the first year of the Retirement History Survey, found that eligibility for social security, pension benefits, asset income and health limitations all contributed significantly to the retirement decision, with limiting health conditions the most significant factor. The interaction of private pension benefits and poor health was significant in explaining decreases in labor force participation. Labor market conditions and job characteristics were not found to be significant factors in the retirement decision. In a later study using the same data base, Quinn found that holding health status and pension eligibility constant, job characteristics had a significant impact on the early retirement decision. Job characteristics were also significant, even in those cases where ill health or pension benefits were the deciding factors. Jacobson (1972a, 1972b) also reported that among those with jobs requiring physical activity, workers were more likely to retire when they became eligible for pension benefits.

Bowen and Finnegan (1969) have stated that the decline in self-employment occupations has contributed to declining labor force participation rates, since the retirement process for the self-employed is more often a gradual one. Self-employed men age 60 to 64 are two and one-half times more likely to work part time than are wage and salary workers (Rones, 1978). Thus, the decline in employment in rural occupations where self-employment is more predominant has been a contributing factor to overall declining participation rates (McKain, 1955 and Gallaway, 1971).

With regard to the impact of wage rates on the retirement decision, Boskin (1977) finds a positive relationship between wages and the decision to remain in the labor force, and Burkhauser (1976) has found that the probability of accepting a pension benefit declines as wages increase. Anderson, Clark, and Johnson (1978) have examined retirement in dual career families and found that the labor force participation of both the husband and wife are positively related to the wife's wage.

Vroman (1971), Sander (1968), Boskin (1977), Gallaway (1965), and Pellechio (1978) have investigated the effects of the social security earnings test on labor supply. Vroman found that the 1965 increase in the earnings ceiling resulted in a slight increase in the proportion of social security beneficaries with covered earnings. Sander found that there was no discernible labor supply effect resulting from the 1960 change in the earnings tax from 100 to 50 percent. Gallaway states that the earnings test should not impact upon labor force participation rates, since workers should respond by decreasing hours of work rather than withdrawing from the labor force altogether. This may account for the increase in part-time work among employed males, which has risen from 20 percent in 1957 to 42 percent in 1974 (Campbell and Campbell, 1976). Pellechio examined a sample of men who worked at some time during the year and found that elimination of the earnings test would increase hours of labor supplied. The major impetus was found to be the earnings exemption rather than the tax rate.[27]

A factor which may influence labor force withdrawal of the elderly is the existence of a mandatory retirement provision. Reno (1976) stated that 36 percent of all males in the survey of newly entitled beneficiaries were subject to a compulsory retirement provision on their last job. Bowen and Finnegan estimated that mandatory retirement causes a decrease of five percentage points in the labor force participation rate of males age 65 and over.

The passage of amendments to the Age Discrimination in Employment Act raised the mandatory retirement age from 65 to 70. Marc Rosenblum has stated that the effect of this change will be to increase the labor force by about 200,000 older workers per year. James Schulz (1974) estimated that approximately 7 percent of all workers retired in 1970 at age 65 were unwilling to retire but compelled to do so by compulsory retirement provisions. Using Schulz' estimate, the Department of Labor calculated that approximately 80,000 to 130,000 additional males age 65 to 69 would have been in the labor force in 1976 if the mandatory retirement age had been set at 70 in that year (Rones, 1978).[28] It is possible that, as the population ages, greater numbers of older workers will avail themselves of its provisions and continue in the labor force past age 65.

While the literature concerning the labor supply of the elderly has not resulted in a definitive picture of the influence of all relevant factors upon the retirement decision, it does appear evident that

[27] One caveat which should be recalled when reviewing literature examining the impact of the earnings test is that the conclusions drawn are only as accurate as the data which support them. Many persons who are subject to the earnings test simply receive their wages in cash and do not report them. Survey data would not detect such behavior. Evidence exists, however, to suggest that such practices are widespread and that the size of the "underground economy," which such practices contribute to, is quite large (Gutman, 1978).

[28] It should be noted that past studies have not separated the effects of mandatory retirement policies from the behavior induced by pension plan rules. A study now underway at The Urban Institute for the U.S. Department of Labor will complete such an analysis.

retirement income and availability and health considerations are the major determinants of labor force withdrawal. Thus, the relative size and age distribution of the labor force in the next century should be strongly influenced by how these two factors develop over time.

B. Impact of Aging on the Unemployment Rate

The overall unemployment rate reflects numerous contributing factors, including those related to economic cycles and those which are noncyclical in nature. Recently, attention has been given to the noncyclical determinants of unemployment, with the major determinant in this category being the demographic composition of the population. Studies of the impact of changing demographics on past unemployment rates are useful for the insight they offer with regard to the impact of future demographic changes on unemployment rates.

Flaim (1979) analyzed the effect of demographic changes on the overall unemployment rate over the past two decades. He found that, over the period 1957–77, changes in the structure of the population accounted for a 0.6 to 1 percent increase in the overall unemployment rate. This increase was largely due to the entry into the labor force of the baby boom cohorts. When examining the compositional changes which have occurred since 1967, Flaim finds that changes in the demographic composition of the population and changing labor force participation rates have exerted a relatively equal impact on the unemployment rate. Flaim projects that in the near future, the declining proportion of youths in the labor force will exert a downward pressure on the unemployment rate. He predicts that, by the year 1990, changes in the population composition will account for an unemployment rate that is half a percentage point below what it would have been in 1977.

Gordon (1973) estimated that changes in the age-sex distribution of the labor force between 1956 and 1967 caused an increase in the national unemployment rate of about 0.25 percent. Similar calculations for the 1956–70 period show that compositional changes caused an increase of 0.34 percent.

Perry (1970), in examining unemployment rates by age-sex groups, found that, as the relative size of an age-sex group has grown, its relative unemployment rate has worsened. A prime example of this phenomenon can be found in the young age groups. The converse is also true, so that, as the proportion of prime age males has declined, so has that group's unemployment rate. Perry further states that, while substitution in unemployment across age-sex groups has occurred, it has been insufficient to prevent the increasing divergence in age-sex group unemployment rates. For example, workers under age 25 comprised 15 percent of the total employed in 1956 and 20 percent in 1969, yet 31 percent of the total unemployed in 1956 and 50 percent in 1969 were under age 25.

Wachter (1976) also stresses the relatively low substitutability of younger and older workers, stating that older workers are more established in their career paths and have accumulated valuable on-the-job training which younger workers cannot supply. He attributes the significant rise in the nonaccelerating inflationary rate of unem-

ployment over the past 15 to 20 years[29] primarily to changing demographics.

Stafford (1979), on the other hand, attributes the longer spells of unemployment which older workers experience to lower rates of accumulation of on-the-job training and stronger employer-specific commitments. Stafford also states that spells of unemployment experienced by older workers often turn out to be "retirement furloughs." Since older workers do have strong employer-specific commitments and do experience longer spells of unemployment, those older workers who are eligible to receive social security or pension benefits may be induced to drop out of the labor force rather than search for jobs.

In conclusion, it appears likely that the declining rate of growth in the labor force (as discussed in the previous section) coupled with the decreasing proportion of the unemployment-prone teenage group will result in lower future aggregate unemployment rates. In addition, there will be greater incentives for employers to retain older workers, hence lowering the unemployment rate and/or decreasing the duration of spells of unemployment for that group.

C. Impact of Aging on Productivity

What little literature exists regarding age-specific productivity rates indicates that there is little relationship between age and productivity. A series of reports by the Bureau of Labor Statistics (1956, 1957a, 1957b, 1960, 1964) examined the relationship between job performance and age in the clothing, footwear, and household furniture industries, as well as among office workers and Federal mail sorters. These reports generally found that the variability in productivity within age groups exceeded the variability across age groups. A similar study by Hilary Clay (Clay, 1956) of performance in relation to age at two printing shops reached the same general conclusion. Clemente and Hendricks (1973) have also stated that age is a poor predictor of job performance. A more recent study by Schwab and Heneman (1977) of semiskilled, piece-rate workers found that productivity actually increased with age. However, after controlling for experience, the age-productivity relationship was no longer significant.

As Sammartino points out (Sammartino, 1979), the existing research on productivity suffers from two major flaws. First, none of the studies mentioned examines changes in productivity as an individual ages. What is measured is rates of productivity across age cohorts at a single point in time. Thus, it is unclear whether the observed productivity reflects the impact of age or the impact of differing attributes of different age groups. Second, age cohort productivity measures may be suspect due to the problem of selectivity. Presumably, less productive workers are eliminated from the labor force over time, and the measurement of job performance with relation to age does not control for this factor. Thus, it would appear that the relative lack of recent, systematic literature and the questionable methodology utilized in the existing literature leave the relationship between age and productivity open to question.

[29] The nonaccelerating inflationary rate of unemployment is defined as the unemployment rate at which the inflation rate is constant.

With regard to labor force growth and productivity at the aggregate level, Leibenstein (1972) states that aggregate productivity is enhanced with labor force growth since young entrants are better equipped in terms of human capital (i.e., education). Therefore, he would state that the greater the turnover from older workers to younger workers, the faster the increases in productivity growth. However, it might also be stated (Serow, 1976) that the decline in turnover (slower labor force growth) would permit increases in the level of human capital of the new entrants which would in turn increase aggregate productivity.

Serow (1976) calculated indices of productivity to the year 2020 after estimating productivity by age. He utilized census data on earnings by age as a function of educational attainment to compute weighted mean earnings by age groups, with the weights equal to educational attainment by age. The cohort with the highest weighted average annual earnings was used as the base and set at 1, and the remaining cohorts were expressed as percentages of this base. The index values derived in this manner were: 20–24, .417; 25–34, .760; 35–44, .978; 45–54, 1.0; and 55–64, .824. (This calculation rests on the assumption that earnings are a direct reflection of productivity.) These indices of productivity were then used with labor force projections based on census series D and E population projections. The resulting indices show marginal increases in aggregate labor productivity over time as a function of the changing age composition of the labor force. As table 4 shows, the population aging which takes place under series E projections yields higher levels of productivity than under series D with its lower proportions of older workers.

TABLE 4.—SEROW'S INDICES OF AGGREGATE LABOR PRODUCTIVITY, SERIES D AND SERIES E PROJECTIONS, 1970–2020

	1970	1980	1990	2000	2010	2020
Series D	1.0000	0.9915	1.0080	1.0038	1.0015	1.0040
Series E	1.0000	0.9915	1.0080	1.0072	1.0045	1.0063

Source: William J. Serow, "Slow Population Growth and the Relative Size and Productivity of the Male Labor Force," Atlantic Economic Journal, spring 1976, p. 64.

Serow then takes these indices one step further and estimates the relative values for output/labor, output/capital, and capital/labor ratios for alternative demographic situations, from 1970 to 2020. It is anticipated that, with smaller growth in the labor force and smaller inputs of labor, more capital may be utilized per unit of labor. Greater investment in both physical capital and human capital can be anticipated as the growth in the labor force slows. Thus, labor productivity would be higher under the projected slow-growth population than the faster growing population, with the output-to-labor ratio higher and the output-to-capital ratio lower. This smaller output-to-capital ratio is not surprising since, as the supply of capital rises relative to labor, each successive unit of capital input adds progressively smaller amounts to output. Table 5 displays Serow's estimates. Serow's findings confirm the earlier findings of Phelps (1972) and Spengler (1972).

TABLE 5.—SEROW'S ESTIMATES OF RELATIVE VALUES FOR OUTPUT-LABOR, OUTPUT-CAPITAL, AND CAPITAL-LABOR RATIOS FOR ALTERNATIVE DEMOGRAPHIC SITUATIONS, 1970–2020

	Output-labor [1]		Output-capital [1]		Capital-labor [1]	
	Series D	Series E	Series D	Series E	Series D	Series E
1970	100.0	100.0	100.0	100.0	100.0	100.0
1975	104.5	103.7	103.1	106.3	101.4	102.3
1980	119.0	118.0	122.3	119.1	97.3	99.1
1985	134.4	138.0	133.6	134.3	100.6	102.8
1990	150.4	154.4	142.4	142.6	105.6	108.3
1995	167.3	174.2	147.8	151.9	113.2	114.7
2000	188.9	191.2	159.3	152.5	118.6	125.4
2005	208.5	217.0	161.3	162.3	129.2	133.7
2010	235.9	246.8	172.2	162.3	137.0	152.1
2015	287.2	288.1	180.5	173.8	159.1	165.8
2020	314.0	321.9	177.4	169.5	177.0	183.9

[1] 1970 equals 100.

Source: William J. Serow, 1976, p. 67.

Thus, while the evidence on age-productivity relationships at the individual worker level are inconclusive and do not support a generalized statement with regard to the impact of slowing population growth and population aging on productivity, the literature which addressed aggregate productivity levels is more conclusive. Based on the research conducted by Phelps, Spengler, and Serow, it can be stated that declining population growth rates and concomitant population aging will result in greater capital-labor ratios and increased aggregate productivity.

D. Impact on Vertical Mobility

The consensus in the literature with regard to vertical mobility is that, under conditions of slowing population growth and population aging, such mobility is impaired. Spengler (1971) states that upward mobility is limited in the same manner that mobility within military establishments is limited in the absence of war. Insofar as seniority determines position and status, the proportion of superior positions allocated to older persons would be relatively high while the allocation to younger persons would be relatively low. The access of non-prime-age workers (those under age 40) to higher positions would be much more limited under conditions of slow growth than rapid growth. Wander (1972) agrees with this conclusion, and she hypothesizes that smaller proportions of young workers could result in diminution of wage differentials by age, thus removing incentives for younger workers to improve their skill levels to receive higher wages. Spengler (1971) also states that the decrease in vertical mobility would necessitate some "restructuring of remuneration to diminish inequality in the reward structure at least to the level at which performance and output are not adversely affected."

Keyfitz (1973) states that an increasing population facilitates individual mobility. He estimates an equation for the relationship between individual mobility and population increases to demonstrate the effect of population growth on promotion by age. This equation shows that a change in population growth from 2 percent per annum to

zero growth implies a 4½ year delay in reaching the middle positions of an average factory or office. In terms of higher proportions of elderly individuals in a stationary population, it is reasonable that retirement decisions and mortality would impact upon the promotion opportunities of those remaining in the work force. However, Keyfitz found that a rapidly increasing population is more than three times as advantageous as a high level of mortality in terms of promotions for the survivors. Resignations (or early retirement) are analogous to levels of mortality, for as Keyfitz points out, it is immaterial to those remaining in the labor force whether those exiting do so as a result of voluntary withdrawal or death. However, mortality, resignations prior to age 65, and population increase all contribute to more rapid job advancement.

Since age and seniority are necessarily highly correlated, increasing proportions of elderly persons will inhibit upward mobility. Browning (1975) argues that early exits from the labor force would increase upward mobility. However, while the encouragement of early retirement policies may have advantageous effects upon labor mobility, it is in direct opposition to the encouragement of prolonged work life to compensate for the declining growth in the labor force and increased dependent/worker ratios.

Browning suggests that multiple careers may be the solution to the mobility problem, arguing that when workers reach an impasse to upward mobility in one career they might switch to another. He recognizes that the severe decline in earnings which normally accompanies such movements (since seniority and experience would be inapplicable in a new career) would have to be lessened in order for this to be a palatable solution. Keyfitz suggests three possible solutions. The first involves increasing the indicators of status, the rationale being that if there are four levels of machine operators rather than two, the opportunity for perceived advancement would be increased. His second solution is elimination of all indicators of status. His final solution is to advance technology to the point where gradations in labor skills are less relevant than gradations in technology. Barring these institutional changes or others, it is likely that upward mobility will be dampened by population aging.

E. Impact on Industrial Mix and Occupational Distribution

The main determinant of the impact of population aging on the future industrial mix and occupational distribution will be the change in preferences reflected in demand for final products. If, for example, a more elderly population is predicted to demand relatively more services than manufactured goods, then industries will respond to such demand, and employment growth will be heavier in service industries.

Technological advances are another factor which impact upon industry growth; however, growth of this type may not translate into employment growth. Technological advances will be most disadvantageous in terms of employment for the older worker. Skills obsolescence is hastened by technological change, and older workers are more likely to be affected by skill obsolescence. Younger workers with more recent education and training are more likely to be familiar with the latest technological advances. In addition, where training is required, employers are more likely to train younger than older workers,

since the costs of training can be recovered through the younger worker's longer work life. Younger workers are thus more likely to be employed in growth industries, while older workers are disproportionately concentrated in declining industries. In 1970, over half the employed men aged 45 and older were working in agriculture, mining, construction or nondurable goods manufacturing—all industries of slow or declining growth (Sammartino, 1979).

With regard to occupation distribution, shifts in aggregate demand arising as a result of demographic changes will play the most important role. For example, the declining student population will result in decreased demand for teachers, while the increased elderly population may necessitate increased employment in the health services sector. The literature relevant to these issues will be discussed in greater detail in the following section, which examines the impact of population aging on the level and composition of aggregate demand.

II. IMPACT ON INCOME, CONSUMPTION, AND WEALTH

A. Impact of Aging on Income Distribution

The combination of the aging of the baby boom cohorts and continued low fertility levels can be expected to impact upon the U.S. income distribution in two important ways. First, it can be anticipated that the income distribution will become more unequal than it currently is; and second, shifts in the income distribution will increasingly occur as a result of income redistribution policies.

1. INCOME INEQUALITY

The relative economic position of the elderly has been improving recently, and most likely will continue to improve. The occupational history and educational level of the future elderly will be substantially different from those of the current older population. Increased coverage under government transfer programs, as well as cost-of-living indexing of social security benefits, have served to improve the economic status of the elderly.

The median income for unrelated individuals and families with heads aged 25 to 64 each grew by 4 percent over the 1970–76 period, while the median income of families with older heads grew by 18 percent and of elderly unrelated individuals by 22 percent. A similar pattern is observed in the numbers of elderly with incomes below the poverty level. Between 1969 and 1976, the number of persons age 65 or older with incomes below the poverty level declined from 5.9 million to 4.3 million. However, the subgroups of the elderly population who experienced slower or zero decline in poverty rates are those groups expected to increase most rapidly in size over the coming decades—women, nonwhites, and elderly individuals living alone. (Fowles, 1978.)

In examining the incomes of the over-65 age group, an even clearer picture is presented if we adjust for family size differences, since families headed by persons age 65 or older are generally smaller in size than families with nonelderly heads. In 1974, families with elderly heads had incomes equal to only 56 percent of the median income for all families. However, after adjusting for family size, the proportion increases to 82 percent. (Census, 1976.)

In addition, the income of the older population varies dramatically according to age. Schulz (1976) points out the need to distinguish among different age groups within the elderly population. When such distinctions are made, the income differentials are striking. In 1976, the median income for families with a head aged 55 to 64 was $16,118, while those families with heads age 65 and over had a median income of $8,721.[30] (Census, 1977.) Susan Grad, reporting on data from the 1972 survey of the status of the elderly, found that the median income of those aged 60 and 61 was $6,993, while among those aged 62 to 64 and 65 to 67 the median incomes were $6,388 and $4,450, respectively.

These age-income differentials clearly reflect the transition from worker to retired status and reliance upon sources of income other than wages and salaries. Thus, on the one hand we can expect the income distribution across the U.S. population to become more unequal as the population ages, since greater numbers of persons will be reliant upon retirement income sources which are dramatically lower than their preretirement income levels. However, on the other hand, we must consider the overall age-income profile, particularly as it pertains to those elderly who are either a few years away from retirement at age 65, or who continue to work after attaining age 65. Such workers may be at their peak earnings level.

Cross-sectional data reveal a standard age-earnings profile. Initial entry earnings are low, with the earnings of successive age groups continuously higher until they peak at age 45 to 54, with those aged 55 to 64 receiving lower earnings than the next younger age group. Such a scenario would tend to skew the income distribution even further, with incomes increasing up to age 54, decreasing gradually among the 55 to 64 group, and rapidly declining in the 65 and over group.

Becker (1964), Miller (1965), and Kreps (1976) combined cross-sectional data sets to follow a cohort over its working life. These studies showed that contrary to the results of the cross-sectional analyses, average earnings continue to rise until age 65. Colberg and Windham (1970) reached similar conclusions, stating that cohort or historical incomes in the United States do not show a decline, even in real terms, for the last decade of work.

Thus, two factors may serve to influence the income distribution in the next century. While the absolute number of elderly will be increasing, the youngest among the elderly will be at the peak of their earnings profile, and the older elderly will be at the nadir of their lifetime income cycle. This implies that as the population ages, the income distribution will first become more equal as wage earners attain their earnings peak, then gradually diverge as the post-65 workers who remain in the labor force experience earnings declines and as retirees experience significant income losses.

2. THE ROLE OF INCOME REDISTRIBUTION

We now turn to the second impact which population aging will exert—the increasing role of income redistribution in establishing the overall income distribution. Danziger and Plotnik (1977) found that the degree of measured inequality of pretransfer income is greater for

[30] Referenced in Clark, Kreps, and Spengler (1978), p. 924.

aged individuals than for any other group.[31] However, these same individuals also benefit from the greatest equalization of income through government transfers. Danziger and Plotnik reveal that, in 1974, income inequality was decreased through transfers by 41.5 percent for elderly single males and 51.2 percent for elderly single females. This decrease in inequality was brought about through government transfers, i.e. the redistribution of income from those under age 65 to those over age 65. Robert Clark (1977) estimated that the proportion of an average worker's income that is transferred to finance support programs for the elderly is over 12 percent, a threefold increase since the 1950's. Clark constructed a model to project future transfer rates under differing assumptions of retirement age, fertility, and replacement rates. He found that, if fertility rates are assumed constant at the replacement level, and if retirement age and replacement rates also remain constant, the resultant changes in the age structure of the population alone would require a 50-percent increase in the social security tax by the year 2050. If retirement age continues its current downward trend and declines to age 60 by 2050, a 200-percent increase in the tax rate would be required. However, if the retirement age were to increase to age 70 as a result of the slow growth in the labor market, the tax rate could be reduced slightly.

Rejda and Shepler (1973) found that if real social security retirement benefits increase by as little as 1 percent annually, under replacement level fertility rates, real per capita personal income must increase by at least 2.01 percent annually to avoid increasing the real financial burden on active workers. They state that such growth in personal income appears untenable; therefore, the shrinking pool of active workers will bear the brunt of financial support of the growing pool of elderly. Income redistribution will be required in increasing degree in order to maintain adequate standards of living for the elderly under conditions of population aging.

B. Impact of Aging on Consumption

In this section, we address the direct impact of an aging population on the aggregate consumption function. We do not discuss indirect impacts, such as the effects of a lower proportion of workers on output and aggregate income and hence on aggregate consumption.

Population aging may affect consumption behavior as a result of several factors. These factors include the following:

(1) The elderly may have different expenditure patterns than other subgroups of the population.

(2) The elderly may have a different income distribution than the population as a whole, and their level of disposable income may impact upon their consumption behavior; and

(3) The elderly generally live in smaller household units than does the general population, and household size may influence consumption behavior.

Eilenstine and Cunningham (1972) point out the contradictory nature of at least two of these factors. They find that age and household size variables affect relative consumer spending in inverse ways.

[31] Referenced in Jennifer Warlick, "Income Distribution, the Elderly, and Public Policy," paper presented at an HEW workshop on work, income, and retirement, Mar. 8, 1979.

They examined 23 expenditure categories and found that, for 12 of these 23, the impacts of age and decreased unit size are offsetting. The impacts of age and unit size associated with population aging worked in tandem to increase the relative importance of five expenditure categories and to decrease the relative importance of six expenditure categories.

Denton and Spencer (1976) conclude that aggregate consumption is not affected by variations either in average household size or in the age distribution of the population. However, they do not ignore the possibility that such variations exert direct effects upon particular categories of consumption.

Goldstein (1968) suggests that the age distribution of the population is of less importance than the income distribution. He states that differences in expenditures are frequently much greater for the different income levels of the aged group than they are for different age groups at the same income level.

Reinecke (1964) found that, when household size, homeownership status, and other important characteristics are held constant, the effect of age upon most expenditures is not very great. He found that expenditures for clothing, recreation, and furniture decrease somewhat with age, while medical expenditures increase. However, the impact of income and family size exceed those of age in almost every expenditure category. Reinecke further states that the expenditure patterns among the highest income classes vary the least across age groups. His major conclusion is that differences in expenditure patterns between older and younger age groups are almost totally attributable to the lower income and smaller size of the elderly consuming unit.

Howard and Lehmann (1972) suggest that the aging of the population implied by a lower rate of population growth could have a substantial effect on all industries. They further hypothesize that as the older age distribution increases, it will be more difficult to introduce new products. They also note that the decreasing growth of the labor force and smaller family sizes will encourage greater labor force participation of women. This may in turn lead to increased demand for convenience products such as dishwashers or processed food items.

Thus, two general conclusions can be drawn from the literature with regard to the impact of an aging population on aggregate consumption. First, it appears that the major determinants of any impact will be household size and income rather than age. Second, the overall level of aggregate consumption will probably be affected to a slight degree, while significant shifts may take place among the various sectors. Thus, there may be an increase in the demand for products consumed by older persons (e.g., medical services), but the impact on aggregate consumption will be determined by income rather than age.

C. Impact of Aging on Savings

The theme which dominates any discussion of savings behavior is the life-cycle model. This model was developed by Fisher (1930), Harrod (1948), Modigliani-Brumberg (1954), and Friedman (1957). Mayer (1972) provides a review of existing literature concerning the life-cycle theory. The general notion of this theory is that a pattern

termed "hump saving" results as individuals save during their working years and dissave during their retirement years (Shorrocks, 1975).

However, Munnell (1979) states that this approach is oversimplified and is based on very little evidence, in that the model has not been used to predict savings behavior over individual lifetimes. Clark, Kreps, and Spengler (1978) outline some of the variables which influence saving behavior. Kreps (1971) and Denton and Spencer (1976) conclude that savings is a function of an individual's annual income curve and pattern of family expenditure, in addition to which institutionalized savings (e.g., social security or private pensions) may exert a discouraging effect, while the desire to make bequests may exert a positive effect (Mayer, 1972 and Brady, 1955).

Within the context of population aging, perhaps the most important issue is whether social security, private and public pension plans encourage or discourage personal saving. A 1965 study by George Katona found that pension plan coverage stimulated personal saving. Another study by Phillip Cagan (1965) also suggested that pension plans increase aggregate personal saving. However, Cagan also noted that pension payments to retired workers offset part of the effect on savings and that such payments must be deducted in figuring the net effect on aggregate savings. He defined net aggregate savings as the net growth in pension funds, plus the change in government and business saving, plus the change in other forms of personal saving. He stated that if pension funds stop growing so that benefit payments equal contributions plus interest, the effect of private pensions on savings will be eliminated. Munnell (1974) reanalyzed a subsample of Cagan's survey data and reached contradictory conclusions, finding that pension plan coverage discouraged personal savings.

Munnell (1976) and Feldstein (1974) have identified a dual impact of social security and private pension plans on savings behavior. They state that such plans affect savings patterns through a direct effect and an induced retirement effect.

Feldstein (1974) states that social security depresses personal savings by 30 to 50 percent since, for many families, the major form of household wealth is anticipated social security retirement benefits. However, availability of pension benefits influences retirement behavior, encouraging early retirement. Thus, individuals tend to save less because they hold savings in the form of anticipated retirement benefits, but tend to increase savings because the existence of pension programs lengthens the retirement period and therefore the number of years over which accumulated assets must be spent. Feldstein finds that the stimulating "retirement effect" is outweighed by the asset-substitution effect by more than 2 to 1, with the result being a 50-percent reduction in aggregate personal savings. Barro (1978) finds fault with this conclusion. He states that social security merely replaces intrafamily transfers and that, as such, it should have no net impact on personal saving.

Esposito (1978) reviewed four major studies that analyze the impact of social security on private savings using time series data (Feldstein, 1974; Munnell, 1974; Barro, 1978; and Darby, 1978). He states that none of the four studies produce sufficient evidence that the social security system affects savings. He argues that one of two conclusions can be drawn from this—either time-series analysis cannot isolate the impact of social security on private saving, or the program does not have a significant impact on private saving.

In another study, Munnell (1976) found that private pension coverage discourages personal saving in other forms. However, since there is imperfect substitution of pension saving and other forms of saving, due to uncertainties of vesting, etc., the net impact is reduced personal saving but increased aggregate saving. Such conclusions would only hold, however, if pension contributions exceeded pension benefit payments. Given the increasing size of unfunded pension liabilities and increasing probability of a slowdown in growth of the future labor force, pension plans could bring about a decline in net aggregate saving. Munnell (1979) states that the savings rate is directly related to the age structure of the population and the division of life between work and retirement. She concludes that the predicted demographic shifts coupled with a possible extension of the retirement age could serve to depress the savings rate. However, she admits that such theories are as yet untested.

In summary, the impact of population aging on aggregate saving is ambiguous at best. In addition, the effects of several important variables, such as the projected prevailing age at retirement, relative importance of unfunded pension liabilities, and prevalence of bequest behavior, remain unknown.

III. FISCAL IMPACT

It has been traditional in our society that younger generations help support their parents when they reach old age. Before the 1930's and the enactment of social security, most of this integenerational transfer of income occurred privately through shared living arrangements, gifts in cash or kind, and payments for parents' health care needs. Today, however, a number of government programs exist to make those transfer payments as a collective activity on behalf of individuals, and tax laws have been shaped to benefit the elderly relative to others. Thus, population aging has a significant impact on government taxation and spending and, therefore, on fiscal policy through the direct effects on programs and tax benefits for the aged. There are also indirect effects of aging on fiscal policy, since the economic effects described elsewhere in this chapter will ultimately affect revenues and spending.

The fiscal impacts of aging are described in two parts: impacts on spending; and impacts on revenues.

A. Impact on Government Spending

1. THE LEVEL OF SPENDING

An overwhelming proportion of public spending for aged benefits flows from Federal programs, principally because of the amounts of cash and medical benefits paid by the social security system. Based on data reported in Storey and Hendricks (1979), State and local spending on retirement and aged welfare benefits amounted to no more than 8 percent of all such public spending for fiscal year 1979. In addition to social security cash and medicare benefits, the aged receive substantial payments from Federal employee retirement, veterans' benefits, supplemental security income (SSI), and other welfare programs.

Federal expenditures for aged benefits have risen rapidly in the past two decades. One estimate finds a growth from $13 billion in 1960 to $112 billion in 1978 (Clark and Menefee, 1978). This spending rise represented an increase in GNP share from 2.5 to 5.3 percent and an increase in Federal budget share from 13 to 24 percent. This growth stems not simply from increases in the elderly population but also from price increases and policy initiatives to improve benefits. Adjusting for price increases raises 1960 spending to $27 billion in 1978 dollars and lowers the annual growth rate from 13 to 8 percent, thereby reducing the nominal growth rate by 5 percentage points, or 40 percent of the 13 percent nominal rate.

To sort out the components of the real growth in aged benefits, Clark and Menefee held the "quality" of aged benefits constant over the 1960-78 period to eliminate the variation due to policy initiatives. Three measures of quality were used, all defined per elderly individual—constant benefits in current dollars, constant benefits in real dollars, and constant benefits relative to change in per capita income. These three measures result in the 1960 expenditure per aged person of $768 being compared to 1978 measures of $768, $1,611, and $2,493, respectively.

Under the first measure, all growth in benefits per aged person up to the actual 1978 figure of $4,678 would be attributed to policy change; the other two measures account for about 20 percent and 45 percent of the per capita spending growth, respectively.

Taking into account the actual 1960–78 growth in the aged population, from 16.7 to 23.9 million people, the different approaches taken by Clark and Menefee produce the results shown in table 6. Of the $99 billion increase in Federal spending, a minimum of $5.6 billion can be attributed to increasing numbers of aged. Using the more realistic measures of constant quality of benefits, the population increase accounts for $12 to $18 billion of the $99 billion spending rise.

TABLE 6.—DETERMINANTS OF SPENDING INCREASES BETWEEN 1960 AND 1978 UNDER ALTERNATIVE DEFINITIONS OF CONSTANT QUALITY OF AGED BENEFITS

[In billions of dollars]

	Constant benefits	Constant real benefits	Constant relative benefits
Change due to increase in dollar benefit per elderly necessary to maintain stated policy	0	$14.1	$28.8
Change due to increase in number of elderly	$5.6	11.7	18.1
Change due to increase in benefits per recipient above that necessary to maintain stated policy	93.6	73.4	52.3

Source: Robert Clark and John Menefee, "Increasing Federal Expenditures for the Elderly," paper presented to the 31st annual meeting of the Gerontological Society, Nov. 19, 1978.

Given demographic trends and forecasts, it is easy to see that if "business as usual" with respect to retirement policy and health care financing continues, population aging will have an enormous impact on the Federal budget in the next century. Already, about a quarter of fiscal year 1979 Federal outlays are directly benefiting the aged through social security, medicare, Federal employee retirement, and various welfare programs. If one simply projects these current programs and assumes that overall Federal spending returns to, and remains at, the "historic" level of 20 percent of GNP (it is at 23 percent this year), then the elderly's share of the Federal budget will rise slowly during

this century to 32 percent, then leap upward by another 10 percentage points in the next 15 years, and soar to 63 percent by 2025 (or 12.6 percent of GNP). As a share of labor income, aged benefits will remain fairly stable at 9 to 10 percent until the 2010 "senior boom," the share then rising to 19 percent by 2025.

In the paper cited earlier, Clark and Menefee projected aged benefits using the three measures of constant quality of benefits cited above (constant nominal benefits, constant real benefits, constant benefits relative to income growth). Using the latter two measures, they show that real benefit values can be maintained in the future at far less expense than the simple extension of current trends (with aged benefits claiming only 3.8 percent of GNP in 2025 instead of 12.6 percent). Even if benefits keep pace with per capita income, the GNP share would rise to only 8.3 percent in 2025. Most of the excess spending suggested by extending current spending patterns results from health care costs rising much more rapidly than prices generally. Thus, a long-term failure to control health care costs will mean either a much greater share of the Nation's wealth flowing through benefit programs or an abandonment of current practices in health care financing as being too costly.

In summary, the impact of population aging on the level of Federal spending, while enormous in absolute dollars ($112 billion in 1978 to from $30 to $100 trillion in 2025), may not be significant relative to the total Federal budget or GNP. If spending on the aged simply keeps pace with price increases, the current share of Federal spending (24 percent) and of GNP (5.3 percent) going to the aged could actually decline to 19 and 3.8 percent, respectively. Given the pressures to improve pensions, such a relative decline is improbable, but control of health care costs would result in increases far below the worst-case scenario (to 42 percent of the Federal budget and 8.3 percent of GNP, instead of 63 percent and 12.6 percent). This substantial increase in the share of the Federal budget going to the aged could prompt three reactions: (1) Benefit reforms to achieve savings may be sought; (2) a greater reliance on private pensions and savings and a smaller role for social security could result; or (3) the "historic" size of government (20 percent of GNP) may give way to a larger Federal role as the Nation recognizes that the Federal budget during the 1960's, before maturation of social security and medicare, may be irrelevant to the social needs of a much older population 50 years hence.

2. THE COMPOSITION OF SPENDING

The potential for a rise in the aged's share of the Federal budget implies potential relative reductions in other claims on Federal spending. A relative decline in income and employment programs targeted on families with children might be expected given the trend in age structure. However, other competing demands could well rise over time relative to the current share of spending on Federal Government activities such as energy production, defense, transportation, or space exploration. Thus, the aging of the population will likely transform the past struggle for resources between social programs for low-income families and the defense sector into one between provision of income and services for the elderly versus some other governmental activity.

One aspect of the shift in composition in the budget implied by population aging is an impact on the process of budget-making. Currently, about 75 percent of all Federal spending is classified by OMB as "uncontrollable" because it cannot be modified through the annual appropriations process. Virtually all Federal benefits for the aged, being entitlement programs with benefits adjusted automatically for inflation, are "uncontrollable" in the budget year and account for about a third of "uncontrollable" Federal spending. The cost of these benefits can be controlled through legislation. However, such legislation takes time, particularly when a controversial matter such as the income of the aged is at stake. Thus, Congress can only exert significant budgetary control over the so-called uncontrollable spending through a multiyear effort. In fact, where retirement income is at issue, the time span for real budgetary control is even longer, since political reality dictates that career planning by workers and retirement planning by those already on pensions must be taken into account.

As benefits for the aged grow as a share of the budget, they should also account for a larger share of "uncontrollable" outlays, and "uncontrollable" spending should rise to even more than 75 percent of the total. Thus, for Congress to control the size of the budget in any significant way, the legislation required to do so will have to address fiscal policy goals over a longer and longer time span.

3. INTERGOVERNMENTAL SPENDING IMPACT

Public spending on aged benefits has become essentially a Federal function, with certain exceptions (State/local employee retirement systems, State supplementation of SSI benefits, State matching of medicaid payments). On the other hand, States and localities continue to provide the bulk of the expenses of public education, they pay close to half the welfare aid to needy families with children, and they operate and share in the costs of employment and training programs, social services, and family health care services. While State/local spending on these activities now totals well over $100 billion, Federal spending in 1979 was as follows:

	In billions
Education	$14
Youth employment	3
AFDC, food stamps, child nutrition, and medicaid	22
Maternal and child health	1
Total	[1] 40

[1] Eight percent of all Federal spending.

Thus, social program spending targeted on children and youth or families with dependent children accounts for about half of all State and local expenditures but only a small fraction of the Federal budget.

Since an aging population will increase Federal spending, it may be assumed that a declining proportion of children, youth and younger workers will lessen the demands on State and local budgets. However, with all this budget-making occurring in thousands of disconnected decisions, there can be no assurance that such tradeoffs will be made, although taxpayer efforts to reduce property taxes and growing congressional sentiment to discontinue revenue sharing suggest that this process is already underway to some degree.

However, even an explicit tradeoff of less State/local for more Federal spending based on the redistribution of the population by age group would not likely hold overall public costs of aid to dependent groups to current levels. Several factors may deter any substantial offset to increased spending on the aged. First, aged dependents cost more to support than children, especially if the aged become more female and more minority. And most support for children still comes from their families rather than from public funds. Second, advocates of children will continue to make strong arguments that greater efforts are needed to end poverty, improve education, and improve maternal and child health care, and that there is a bigger payoff to society from long-run investments in children than from maintenance of the elderly. Finally, it may turn out that a decline in the relative size of the child population will not result in a proportionate reduction in the need for public aid of this group since it will be composed more of minority children. The assimilation of families of millions of illegal aliens could also occur in the future, thereby raising the need for public support of children. Thus, it is not at all obvious that the projected rise in Federal spending for the aged will be accompanied by a relative decline in State/local spending for children and youths.

B. Impact on Government Revenues

The impact of population aging on public revenues has not received the same attention as the spending impacts discussed above. Thus, there are no revenue projections that attempt to isolate the effects of aging on changes in revenue collections over time. Clearly there will be some effects, the nature of which can at least be surmised.

1. DIRECT REVENUE EFFECTS

Population aging will affect revenues directly as a result of the growing number of aged for whom special tax laws apply and for whose retirement benefits certain taxes are earmarked. There will also be indirect effects, since aging has a number of economic and employment effects that in turn impact on the revenues generated by the economy. This section discusses the direct effects, which involve: (1) Pressures to increase payroll taxes (or find other taxes to substitute for payroll taxes); (2) resultant counterpressures to hold down income taxes; and (3) increased utilization of special tax benefits for the aged.

Social security, medicare, and public employee retirement benefits are funded primarily by payroll taxes paid by employees and employers. Since social security, medicare, Federal employee retirement, and a good many State/local retirement systems are funded on a pay-as-you-go basis, the necessary payroll tax revenues do not differ greatly from current benefit expenditures at any particular point in time. Thus, unless financing policies are changed, trends in payroll tax revenues will follow spending trends fairly closely. For instance, the past growth in benefits for the aged was financed largely by larger payroll tax collections. Social security taxes account for 28 percent of all Federal revenues today but amounted to only 17 percent of total revenues as recently as 1969. The projections of greater spending on the aged in the next century would be accompanied by greater reliance on payroll taxes. If the most extreme projection discussed

earlier came to pass, with aged benefits absorbing 63 percent of all Federal spending by 2025, then payroll taxes would amount to about 60 percent of all Federal revenues. In fact, Congress has already enacted social security taxes that will total 15.3 percent of payroll by 2011, and must raise taxes by another 1.46 percent of payroll to meet currently projected long-term benefit costs.

To keep total Federal revenues near the Carter administration's goal of 20 percent of GNP, Congress will find it necessary to cut income taxes repeatedly, not only to offset the natural escalation in revenues produced over time by the progressive rate structure, but also to make up for the higher payroll tax rates. Congress is also feeling pressure to reduce payroll taxes by using income tax revenues to pay part of social security benefits or by creating a new tax (e.g., a value-added tax) to support social security.

The payroll tax, being a highly visible and somewhat regressive tax, has lessened in political acceptability as it has risen. But there are economic reasons as well for the interest in substitution of general revenues. A payroll tax is a direct cost of producing a good or service and adds to the cost, and therefore the price, of that product, adding to price inflation and retarding aggregate demand. A value-added tax would also add to inflation and reduce demand. Funding through income taxes produces no such direct link to prices or employment. Instead, such funding is one of many factors determining how governmental fiscal policy affects the economy as a whole.

The special rules for taxation of retirement income and tax breaks accorded individuals age 65 and over account for sizable reductions in taxes that would otherwise be collected. These tax "expenditures" will grow rapidly as the aged population rises, as pension fund contributions accumulate, and as pension income grows. As reported in the paper cited earlier by Storey and Hendricks, the expected 5-year growth in these tax expenditures is as follows:

TAX EXPENDITURES

[In billions of dollars, fiscal years]

	1979	1983
Special exemptions and credits for the aged	$1.5	$2.1
Untaxed retirement benefits	6.6	7.5
Untaxed pension plan contributions (IRA's Keogh plans, employer contributions)	13.3	22.2
Total	21.4	31.8

Thus, in 5 years, a growth of 50 percent in these tax expenditures has been projected.

State and local revenues will be reduced in growing amounts by such tax expenditures as well, since many income tax systems of State and local governments also provide special treatment for the aged, for pension income, and for employer contributions to pension plans. In addition, new tax exemption for the elderly have cropped up in State and local systems in recent years. Particularly popular right now are measures to provide property tax relief through income tax credits or direct property tax credits for the elderly. The District of Columbia and 28 States now provide such relief.

2. INDIRECT REVENUE EFFECTS

Population aging would have indirect effects on revenues as well, since the economic effects of aging will, in turn, modify the tax base and result in more or less tax receipts than would have otherwise been collected. The authors are not aware of any attempt to project such indirect revenue impacts; in fact, such projections would be highly uncertain given the present state of research on the effects of population aging. For example, of vital importance to such projections would be the impact of the older work force on productivity and the effects of a larger retired population on the national saving rate. Assumptions about these factors would need to be better informed by research before the feedback of aging effects into revenue collection could be usefully estimated

IV. IMPACT ON PENSION PLANS AND FINANCIAL MARKETS

A. Overview

An aging population means that, barring changes in pension plan rules or retirement behavior, larger numbers of people will become beneficiaries of pension plans, and for longer time periods given the likelihood of increasing longevity. This larger beneficiary population, eligible for greater real benefits resulting from past wage increases, will mean a continued rise in the real cost of both public and private pension benefits. Rising costs put pressure on funding sources, including the tax base, corporate profits, the compensation of current employees, and the cost of consumer goods. The growing size of pension funds, in turn, raises concerns about their potential dominance over capital markets. This section discusses the implications of population aging for: Social security, employer-provided pension plans, and capital markets.

B. Social Security

The financial pressures on the social security system, which have prompted substantial tax hikes and sent Members of Congress and executive branch officials scurrying in search of alternatives to an ever larger payroll tax, result from a number of both short-term and long-term factors. But a pay-as-you-go system such as social security will always require adjustments in tax levels, simply because the many factors which determine revenues and benefit costs cannot be forecast precisely, especially for a period as long as the 75 years over which Congress strives to set social security financing to achieve a balance in revenues and outlays and maintain a reasonable reserve against short-term contingencies. One of the major developments in recent years that has prompted attention to social security financing is the outlook for a more rapidly aging population than earlier anticipated.

With a system such as social security, in which current revenue flows finance current benefit payments, the relative sizes of the beneficiary and working populations are crucial in determining the extent of the financial burden. Although changes in work force participation of the

working age population and changes in retirement age can greatly affect the long-term situation, the basic demographic constraints are the numbers of persons at working and retirement ages. Under each set of assumptions shown in table 7, the population of retirement age (persons age 65 years or older) is projected to grow sharply as a percent of the working-age population (persons 20 to 64 years old). The large population born during the post-World War II baby boom will start reaching retirement age after the year 2006. But, at that point, the working population will be composed, at least in part, of the groups born during the period of sharply declining fertility starting in the late 1960's. (The fertility rate is defined as the average number of births that the average woman is projected to have over her lifetime.)

TABLE 7.—PROJECTIONS OF THE U.S. POPULATION OF RETIREMENT AGE AS A PERCENT OF THE WORKING AGE POPULATION UNDER ALTERNATIVE FERTILITY ASSUMPTIONS, 1985-2050

	Fertility rate [1]		
	1.7	2.1	2.3
1975	18.9	18.9	18.9
1985	19.5	19.5	19.5
1990	20.3	20.3	20.3
2000	20.3	20.3	20.3
2010	21.3	20.9	20.7
2020	28.4	26.8	26.1
2030	37.5	33.6	31.9
2040	39.2	32.8	30.2
2050	38.9	30.6	27.4

[1] Estimated average number of births a woman would have during her lifetime assuming she followed the pattern of births estimated for each age group of women in the stated year.

Note: The population of retirement age is defined here as 65 yr and over. The population of working age is defined as 20 to 64 yr of age. The underlying mortality assumptions are those of the 1977 social security trustees' report.

Source: 1977 annual report of the board of trustees of the Federal OASI and DI trust funds.

From now on, the fertility rates will, in large part, determine the size of the working population in the next century, but projections are uncertain. The historical pattern indicates a long-term decline in the fertility rate in the United States. From a rate of 5.4 births per woman in the mid-19th century, there was a fairly steady decline, reaching 3.6 in 1900, 3 in 1925, and 2.2 in 1940. Against this long-term decline, the very high fertility rates of the postwar baby boom, which lasted from the mid-1940's until 1960 (peaking at 3.8 in 1957), appear as an aberration. (The abnormal sequence of the great depression, which probably depressed birth rates below the trend, followed by World War II, undoubtedly led to the unusual swing in the birth rate.) Since the late 1960's, the fertility rate has declined to below the level of the 1930's, reaching an estimated 1.7 births per woman in 1976. The so-called "replacement level" fertility rate, which would result in a stationary population, is 2.1.

Although fertility may not remain at its present low level, there have been significant changes in social and economic behavior that could cause future fertility to remain close to current levels. People are marrying later than they used to, and wives are increasingly likely to work. For these reasons, among others, some observers assume the fertility rate will stay on a low plateau around the replacement rate level of 2.1 births per woman; others believe a long-term rate close to

1.9 is more likely. In this latter case, even if the proportion of women who work continues to increase, there will be a decline in taxpaying workers to support social security beneficiaries.[32]

The mortality assumptions are also critical to the projections. When mortality improves at older ages, the number of beneficiaries increases and the average beneficiary collects benefits for more years. The projections in table 7 reflect the assumptions of the 1977 social security trustees' report, which is more optimistic in this respect than earlier reports. The projection of mortality improvements may still be regarded by some as too low. The mortality rates in the 1977 report translate to a life expectancy at birth of 70.8 years for men and 79.6 years for women in the year 2050. If these estimates should be surpassed (some countries have already reported life expectancy for men as high or higher than these figures), then the ratio of beneficiaries to workers would be still higher.

One recent study (Wertheimer and Zedlewski, 1978) simulated the potential effects on the social security system of policies to encourage later retirement by the aged. These projections to 1990 disclosed a possible reduction in the social security tax burden, accompanied by higher incomes for the elderly, through changes in financial incentives designed to reward later retirements. The assumptions used in the study resulted in a 3-percent reduction in social security costs compared to current policy by 1990. This would permit a partial offset to the fiscal impact discussed above, allowing a reduction of 0.7 percentage points in the social security payroll tax rate that would otherwise apply.

C. Employer-Provided Pension Plans

1. PRIVATE PENSION PLANS

Unlike social security, private pension plans finance their liabilities in advance through fund accumulations based on actuarial projections. ERISA requires that private plans amortize employee service liabilities over a 30- to 40-year period. Thus, private pension financing arrangements are not directly sensitive to changes in demographic trends, since each employee's future benefits are financed independent of how large the work force is or how many beneficiaries there will ultimately be.

Thus, the primary direct effect on private pension plans of population aging is the resulting fluctuation in the size of plans' accumulated assets. Currently, plans are building up reserves rapidly in anticipation of a much larger number of pensioners in the 21st century. Total assets amounted to about $215 billion in 1975, an increase of 11 percent over the previous year (Schmitt, 1978). When the "baby boom" generation starts to retire, however, fund liquidations may exceed contributions, and the fund balances could decline. While this pattern of financing poses no particular problem from an individual manager's perspective, it does raise questions about impacts on capital markets (discussed in section D below).

There are other less predictable consequences of aging for pension plans, however. In particular, there is the issue of inflation and benefits.

[32] These data on fertility are presented in more detail in "Financing Social Security: Issues for the Short and Long Term," Congressional Budget Office background paper, Washington, D.C., July 1977.

Since very few plans promise to adjust benefits to offset the full effects of inflation on a retiree's pension,[33] such incremental benefit costs are not advance-funded. They are usually negotiated on an ad hoc basis along with other compensation and benefit issues and are often paid for out of firms' current earnings.

The effect that dollar increases in pension costs have on profits is a function of labor intensity. In a company where salaries and wages take 30 percent of total income and pension costs are 10 percent of total salaries and wages, a 20-percent rise in pension costs increases labor costs by 0.6 percent of income ($.2 \times .1 \times .3$). In a company with higher labor intensity (say 50 percent of total income used for salaries and wages), the 20 percent rise in pension costs will require an additional 1 percent of income ($.2 \times .1 \times .5$). If the profit margin is 15 percent, and if prices remain fixed, profits will be reduced by 4 percent (6/15) in the low labor-intensive company and by 6.7 percent (1/15) in the high labor-intensive one. The potential impact of such costs during an inflationary period will be intensified by the rapid growth of retirees and has implications for shareholders (reduced dividends), consumers (higher prices), employees (lower wage increases), and governments (lower tax revenues) (Paul, 1974).

Another indirect effect of population aging has to do with the actuarial assumptions used to finance future benefits. These assumptions regarding a firm's work force—turnover rates, long-term growth, age, retirement behavior—may prove to be inaccurate for reasons related to aging. For example, if aging is more rapid than expected, the work force may be more stable in size, may turn over less rapidly, and may work until older ages, thereby requiring an alteration in plans' methods for financing benefits (Tilove, 1976).

2. PUBLIC EMPLOYEE PLANS

The aging of the population will also swell the beneficiary rolls of the pension systems of Federal, State, and local governments. In fact, the effects may be seen about 5 years earlier than for private plans since the public employee sector includes plans representing the full spectrum of financing methods. Military retirement is completely currently financed with no reserve fund. The U.S. civil service system maintains a reserve that can cover 5½ years' worth of benefits; employee contributions and matching agency payments provide 38 percent of the system's revenues. State and local systems, by and large, are advance-funded but at rates less than required to meet all future liabilities. Munnell and Connolly (1976) estimated the unfunded liabilities of public employee plans to be $629 billion ($195 billion for the military, $164 billion for the U.S. civil service, $270 billion for State/local plans). However, State/local plan assets totaled $106 billion in 1975, or more than the social security and U.S. civil service systems' assets combined.

Since the unfunded liabilities of the military and U.S. civil service retirement systems are paid from general taxes, that is where the burden of rising costs attributable to a more elderly population will fall. (The most certain aging effect will be from reduced mortality prolonging periods of retirement, since neither the size of the career

[33] A 1974 survey of 1,800 major employer plans found only 4 percent with automatic cost-of-living adjustments, and many of those plans apply caps to the allowable increases (Schmitt, 1978).

military nor the Federal civil service will necessarily relate to the effects of reduced fertility.) Thus, these pension cost increases will constitute a claim on the same resources many look to for relief from rising social security taxes.

State and local pension systems likewise will be affected by improvements in mortality and will be somewhat affected by reduced fertility as well, since State/local sector employment has borne a closer relationship to population trends, and some of the primary services provided by this work force are delivered to children and their families.

For fully funded State/local plans, the impact of aging is analogous to that for private plans. That is, assets will build up rapidly in anticipation of higher costs (to $0.5 trillion by 2000 for the sector as a whole as projected by Munnell and Connolly), with possibly added unplanned liabilities to adjust benefits for inflation. According to Tilove (1976), over half of State/local employees are covered by automatic benefit adjustments, but few are assured complete protection against price increases.

In the case of State/local plans, such unplanned costs will have to be made up by the governments involved, either through tax increases, reduced wage increases, or displacement of other claims on State/local treasuries. And, of course, the underfunded systems may have to look to greater employee contributions and/or tax hikes to meet rising benefit costs, much as social security tax increases have been found unavoidable at the Federal level. But during the 1970's, a number of State and local governments have moved toward greater prefunding, in some cases with less promise of postretirement benefit adjustments or adoption of measures for prefunding them.

D. Financial Markets

As already pointed out above, the aging of the population has prompted a rapid buildup in the assets of private and State/local pension plans. By the end of 1975, these plans' assets plus the social security reserve amounted to one-fifth of the total equity and debt of the U.S. nonfinancial corporate business sector. Private and State/local pension assets increased by a net amount of $24 billion in 1975, which was more than a quarter of total personal savings and 65 percent of the nonfinancial business sector's requirements for external funds (Friedman, 1976). It has been predicted that pension plans will control a majority of all U.S. corporate equities by 1985 (Drucker, 1976).

The most significant issue posed by this dominance in the capital markets is the heightened potential for institutional control over the allocation of capital. For example, it may be attractive for State governments to influence the shape of capital formation through encouragement of mortgage investments or a capital market break for in-State businesses. As Stone (1976) indicates, there is the following economic argument that can be made for government intervention in the investment of pension assets.

Certain economists have contended that there is an inherent market bias which causes funds to be overcommitted to private purposes and undercommitted to public purposes. It is certainly arguable that our society is not allocating a proper share of its investment capital to such public goods as education, scientific research, transportation, or

housing. If the returns to those investments are difficult for an investor to measure or capture, there is likely to be a distortion in our pattern of capital formation.

A second bias results from the fact that large investment institutions are prone to confine their asset purchases to the largest issues of the largest issuers. A large private or public investor may well think it efficient to study only a small number of situations. Only the most substantial investment opportunities attract large investors' attention. Moreover, if they wish to remain fairly liquid, their opportunities are narrowed still further to large investment opportunities which are small fractions of even larger investment opportunities.

This mostly theoretical debate over the social efficiency of private investment will become a heated practical debate as the accumulation of government pension assets grows. Until now, government involvement in capital formation could only have come through mandatory controls, a notion extremely difficult politically to bring about. But the political balance could change as funds for government pension liabilities grow. When governments hold the funds, governments must make the investment decisions themselves.

Pension plan assets have been concentrated in corporate securities. Greenough and King (1976) reported that, in 1973, 79 percent of these funds were invested in corporate stocks and bonds. Within the corporate sector, investments have concentrated on the offerings of major corporations (over 90 percent of stocks held are listed on the New York Stock Exchange). Portfolio turnover has been at a fairly slow rate. Thus, it is feared that pension funds have underutilized opportunities for long-range investments in smaller companies or in new enterprises and have helped create a shortage of risk capital. Continued growth in pension fund assets, coupled with a trend toward homogeneity in portfolios, suggests this pattern of influence on the capital markets may become more pronounced.

In the long run, another concern may arise with respect to the influence of pension funds on the capital markets. That is, as more and more private and State/local plans become fully funded, and as they accumulate funds in anticipation of the retirement of the "baby boom" generation, a rapid liquidation of funds will occur in the next century. As early as 1996 to 2001 for State/local plans, and 2001 to 2006 for private plans, substantial numbers of people born during the 1941–60 period of high fertility will claim pensions. Sometime during the first half of the 21st century, there may well be a net withdrawal of pension funds from the capital markets as liquidations exceed accruals for future liabilities (Hsiao, 1976). Such a withdrawal could result in downward pressures on stock prices and rising interest rates. Unless long-term investment planning for the overall economy properly anticipates this period of pension asset liquidation and appropriate investment strategies are followed, an acute capital shortage could occur during that period.

V. THE IMPLICATIONS OF MIGRATION AND REGIONAL DEVELOPMENT PATTERNS

Movements of elderly individuals among States and regions follow different patterns than those for migrating persons of working age and their families. Should such differences continue, the various economic effects of population aging will have differential impacts on

regions and States, particularly with respect to labor force size and structure, health and welfare costs, and demand for goods and services. This section describes selected studies on the migration of the elderly.

In the decade between 1960 and 1970, the elderly population in the United States increased by 21 percent. However, growth rates varied dramatically across regions and States. The regional growth rates ranged from 12.3 percent for the north-central region to 31.2 percent in the South. Over the period 1970–77, the South absorbed another 1.1 million elderly individuals, an increase of an additional 18.8 percent. Within regions, the South Atlantic was the largest gainer with a 39.2 percent increase over the 1960–70 period and a 23 percent increase over the 1970–75 period.[34]

Even within census divisions, the variation in growth rates is dramatic. Within the South Atlantic census division, the 1970–75 increase in the elderly population ranged from 1.6 percent in the District of Columbia to 36.8 percent in Florida. Similar patterns emerge for the 1960–70 time period. The elderly population in the District of Columbia grew by only 1.9 percent while the increase in Florida amounted to 78.2 percent. In 1960, 553,000 elderly persons resided in Florida; by 1970 their presence had grown to 985,000, and by 1975 over 1.3 million elderly persons resided in that State.

However, rates of increase can be deceiving in that States with small increases in the number of elderly residents may actually rank among the highest in terms of absolute numbers of elderly individuals. Illinois experienced only a 5.9 percent increase in its elderly population during the 1970–75 period, yet by 1975 over 1.1 million older individuals lived in that State. In fact, 45 percent of the total U.S. elderly population reside in the seven States of New York, California, Pennsylvania, Florida, Illinois, Texas, and Ohio, with each containing over a million elderly. By 1977, 17.3 percent of Florida's total population was aged 65 and over.[35] However, of the seven States with the largest absolute numbers of elderly, four—New York, Pennsylvania, Ohio, and Illinois—experienced net outmigration of elderly persons during the 1960–70 period. In some States, such as Nebraska and South Dakota, the proportion of elderly in the total population grew due to outmigration of young persons.

Net migration rates for the 1960–70 time period show a movement of elderly persons out of the Mid-Atlantic and East North Central States and into the South Atlantic, West South Central, and Pacific States. If such movements continue, the increased proportion of elderly individuals in the total population could exert a significant impact on regional development. An examination of the determinants of elderly migration may help to establish the likelihood of a continuation of past trends.

The literature dealing with migration patterns is enormous in size; however, the subset which deals with migration behavior of the elderly is quite limited. Barsby and Cox (1975) have conducted the most comprehensive review of the migration patterns of the elderly. The factors which they identify as determinants of elderly migration behavior include: (1) Family and social attachment; (2) health and climate; (3) homeownership; (4) location at time of retirement; and (5) educational level.

[34] The data cited in this section are taken from Current Population Reports, No. 50, p. 23, May 1976.
[35] University of Florida, College of Business Administration, Florida Statistical Abstract 1978, The University Presses of Florida, Gainsville, 1978, p. 20.

Family and social attachments are negatively correlated with migration when the family and friends of the elderly person are located within the community, and positively related when they are located outside the community. Harold Geist (1968) found that about 80 percent of sampled retirees who chose not to move after retirement did so as a result of social ties. Langford (1962) found that social contacts were a more significant factor in determining migration behavior than were the availability of community or health facilities or services.

Serow (1976) found that while older persons are less mobile than the population observed as a whole, once the elderly decide to move, they are more likely to return to their State of birth. The tendency to return to one's State of birth may reflect the influence of social ties—i.e., familiarity with the environment, community structure and past social relationships. Serow states that, while the migration of the elderly will most likely continue to be concentrated in areas of favorable climate (the "frostbelt" to "sunbelt" movement), increasing numbers of elderly persons will be returning to their States of birth. Serow states that planning for such a trend is crucial if the needs of the elderly are to be met in the future.

Health and climate are two variables which may work in conjunction or in opposition. While poor health may inhibit mobility, it may actually increase the probability of movement to an area of improved climate. Mobility may also be affected by climate independent of health, reflecting personal preferences.

Homeownership may act as a deterrent or a spur to migration. Since a home is a relatively nonliquid asset, homeownership may reduce mobility. A study of Prasad and Johnson (1964) found this deterrent effect. However, Lansing and Mueller (1967) found that the sale of a home provides a stimulus for out-migration.

Barsby and Cox state that a tentative relationship between residency at time of retirement and migration does exist. However, the studies completed to date have not conclusively defined this relationship. It does tentatively appear that residents of suburbs or SMSA's are more likely to migrate than residents of other locations. Job opportunity is another factor for which the relationship with migration behavior is tentative at best. It would appear reasonable, however, that the inducement to migrate because of job opportunities declines with age. Postretirement income appears to be positively related with the propensity to migrate. This is not surprising since migration involves economic costs.

Given the extended durations of unemployment experienced by older persons, it is not surprising to find that elderly persons in the labor force are less mobile than labor force nonparticipants. Bowen and Finnegan (1969) reported a negative relationship between labor force participation and net migration rates of older persons. Other studies of Miller (1965) and Goldstein (1968) confirm these findings.

The study by Lansing and Mueller and another study by Bultena and Wood (1969) reveal that higher education and skill levels are related to higher migration rates in the elderly population. Elderly migrants were more likely to have held jobs in the professional or managerial occupations prior to retirement than were elderly nonmigrants.

Thus, based on the existing literature, Barsby and Cox (1975) conclude that "high mobility among older persons is concentrated

among those who have moderate income levels, live in suburban areas, are well-educated, and held managerial or professional positions prior to retirement." However, the authors caution that much of the evidence supporting these conclusions is of questionable validity.

In terms of patterns of elderly migration, several observations are made of Barsby and Cox. First, older persons are less mobile than younger persons. Gross migration rates of young persons were over twice as high as the rates for older persons during the 1955–60 and 1965–70 time periods. Second, the elderly tend to move from larger States to smaller States. Third, elderly persons show a greater tendency to move into a few specific States than do the nonelderly. During the 1965–70 period, the net inmigration rates of those aged 65 and over exceeded that of the under-65 population in eight States: Arizona, Florida, Nevada, North Carolina, Oklahoma, Oregon, South Carolina, and Tennessee.

While the determinants of elderly migration may remain only tentatively identified, the observed trends indicate that the migration patterns of the elderly do differ from those of the nonelderly population. The economic consequences of such differences in migratory behavior will certainly increase as the population ages, both at the regional level and within specific States. Some economic consequences of population aging observed at the national level will be felt more keenly at the regional and State level. Migratory patterns of the population, coupled with prolonged low birth rates, may well serve to magnify at the subnational level the economic impacts of population aging observed in the United States as a whole.

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Chapter 3

PRIORITIES FOR RESEARCH ON THE INCOME AND EMPLOYMENT OF OLDER AMERICANS

The purpose of this chapter is to suggest an agenda of priority research topics that constitute the most important areas where an advancement in knowledge can enhance consideration of new policies relevant to the income and employment of the aged. The research agenda is structured along the lines of the organization of policy issues set out earlier in chapter 1. The content of the agenda relates to the issues singled out in that chapter, and the specific research topics are designed to be incremental to the knowledge base cataloged in the appendix to this report and discussed in chapter 2.

This chapter concerns itself solely with research areas relevant to major policy issues. Thus, research topics not directly relevant to the analysis of major policy issues and proposals are excluded from the discussion. Analyses of specific policy proposals that will be required eventually for legislative debate are not described here either. Rather, this agenda deals with the underlying research necessary to the performance of such legislative analysis. The context from which this agenda springs—i.e., the current state of the art—is discussed only briefly in this chapter, but such descriptions are available from a number of sources.[1]

I. DATA AVAILABILITY

A. Relevant Data Bases

If a research agenda is to be of immediate value, it must be compiled within the bounds of feasibility. An agenda which does not pay heed to data availability may be useful as a guide for long-run research planning but may be nothing more than a wish list for the short run. Research issues presented in this chapter can be undertaken with the use of existing data sources or with the aid of data sets currently under development.

Several general types of data are required to perform research concerning issues of retirement and employment of older Americans: (1) Demographic data such as age, sex, race, and household composition; (2) financial data such as income by source, assets by type, retirement plan coverage, vesting and benefit receipt, and savings behavior; and

[1] The following are selected descriptions of the state of the art in various research areas:
Louis Esposito, "Effect of Social Security on Saving: Review of Studies Using U.S. Time Series Data," Social Security Bulletin, Vol. 41, No. 5, May 1978, pp. 9-17.
Thomas A. Gustafson, "Labor Supply of the Elderly," unpublished paper, February 1979.
Alicia H. Munnell, "Research on Macro Effects of Retirement Income Programs," unpublished paper, Feb. 15, 1979.
James R. Storey and Gary Hendricks, "Retirement Income in an Aging Society: The Need for Better Information for Public and Private Decisions," Urban Institute paper, December 1979.
The Urban Institute, "Income Adequacy and the Elderly: Priority Research Issues," Mar. 31, 1977.

(3) employment data such as labor force status, occupation, wage rate, hours of work, work histories, and coverage by mandatory retirement rules.

Several major data bases are available which contain some or all of the data items required in order to analyze the policy issues of interest here. In addition, several data sets currently under development provide much of the requisite data. The following sections describe the data sets (other than the regular census data collections) that are universal in nature. (Additional data files are available on both individuals and pension systems which, although narrower in scope, are useful in specific research projects.)

1. THE LONGITUDINAL RETIREMENT HISTORY SURVEY (LRHS)

The LRHS is a 10-year longitudinal survey conducted by the Social Security Administration to study the attitudes, plans, resources, and activities of Americans as they pass through the usual retirement period of the life cycle. The first survey was taken in 1969 and included individuals aged 58 to 63. The panel was reinterviewed every 2 years on questions of: Labor force status, retirement and retirement plans; health; household, family and social activities; and income, assets, and debt.[2] Data from the first four surveys are currently available. Numerous research projects have utilized the LRHS to examine issues relating to the retirement and employment of older Americans.

2. THE 1973 CPS–SSA EXACT MATCH FILE

The exact match file is the result of a joint effort between the Bureau of the Census and the Social Security Administration. The file is an exact match of the census' March 1973 current population survey households with data from social security benefit and earnings files. The current population survey March file is an annually recurring household survey which contains questions on employment, unemployment, and income in addition to demographic questions. The social security benefit and earnings files contain data on all social security beneficiaries and earnings histories of all workers with covered employment. While the usefulness of this exact match file has somewhat diminished as the data become outdated, another file will be available soon which will match the social security earnings file with the March 1978 CPS.

The exact match file has been used to examine issues surrounding social security benefit receipt. It is also a useful data base for simulating existing or proposed pension plans.

3. PENSIONS AND SAVINGS SURVEY

This is an ongoing survey sponsored by the President's Commission on Pension Policy. It has been designed to permit an analysis of the effects of social security, pensions, and other retirement plans on private savings behavior. It will contain detailed data on family composition, a recent earnings history, work history, income and work-related expenses, net worth, retirement plans, pension plan coverage, and pension assets.

[2] For a more detailed description see: Bennie A. Clemmer and D. Bruce Pell, "Technical Note," Social Security Bulletin, August 1975, p. 19.

While this data file has a potential for enormous value for researchers in the area of employment and retirement of older workers, a few caveats as to the final value of the survey must be stated. First, the President's Commission has undertaken a large scale, very comprehensive survey and must complete this task within a quite limited time frame. The feasibility of this undertaking is therefore subject to question. Second, if the survey data are to be used as a basis for the analysis of the impact of retirement plans on savings behavior, the current time period is quite atypical since today's high interest rates and rapid price inflation would be expected to impact on savings behavior quite significantly. Finally, the types of data which are the primary focus of this survey are the types most subject to problems of nonresponse and underreporting. However, if these problems are properly addressed, the survey can be of tremendous value in examining various research issues.

4. EMPLOYEE/EMPLOYER SURVEY OF RETIREMENT POLICIES

This survey is being conducted for the U.S. Department of Labor. It is designed to obtain data on the retirement plans of a sample of employees and on their employers' retirement policies and pension plans. The employee portion of the survey contains demographic information, questions on health limitations, attitudes toward retirement, labor force history, income and assets, and retirement plans. The employer portion contains queries on company retirement age policy, anticipated costs resulting from the increased mandatory retirement age, and nonretirement related benefits in addition to basic background data on the firms. The pension plan sponsor survey will obtain data on the number and composition of benefit payments, and provisions for early retirement, vesting, and other pension features. This survey will be completed by mid-1980, and should provide researchers with a rich data base for the analysis of pension and retirement issues.

5. THE SURVEY OF INCOME AND PROGRAM PARTICIPATION (SIPP)

This survey, sponsored by the Department of Health, Education, and Welfare, is currently under development. This household survey has been designed to produce data on income, assets, liabilities, program eligibility and participation, taxes, pension coverage, savings, and demographic composition with sample sizes selected to provide statistically significant data for each State. The survey is now experimental but will be conducted on a recurring basis beginning in 1981.

SIPP offers several improvements over existing household surveys (such as the CPS). It will provide reliable estimates by State; asset, pension, and health data will be obtained in greater detail, and income will be reported either quarterly or monthly as well as annually. HEW, in conjunction with the Bureau of the Census, is currently conducting an income survey development program (ISDP), the main purpose of which is to resolve a series of technical and operational issues prior to selecting a final design framework for SIPP. Data from both the ISDP and SIPP will provide analysts with a greater opportunity to investigate such issues as transfer program benefit receipt, savings behavior, and retirement patterns.

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6. PENSION PLAN DATA BASES

Administrators of private employee benefit plans with 100 or more participants are required by law to file an EBS–1 form annually with the U.S. Department of Labor. This form contains the following data items: Sponsor and administrator, type of plan, sources and methods of determining contributions, method of asset accumulation, eligibility requirements, vesting provisions, portability or reciprocity features, length of service and break in service rules, requirements for pension benefits and benefit computation procedures, joint and survivor annuity provisions, and requirements for welfare benefits. These forms are processed and are currently available on computer tape. They provide a wealth of information on the types of plans offered, with detail on specific plan provisions, the number of active and retired participants and beneficiaries, and data on the number and cause of plan terminations. It is a valuable tool in any analysis of the impact of specific pension (or welfare benefit) plan designs.

The U.S. House of Representatives Pension Task Force conducted a one-time survey of public employee retirement systems. This 1976 survey sampled a universe of 68 Federal and 6,330 State and local government pension plans. The sample frame covered 100 percent of Federal employees and 96 percent of State and local employees. It was designed to provide information on public pension plan administration, benefit structure, finances and funding. A companion survey gathered data from approximately two-thirds of the public pension funds with assets in excess of $50 million. These data include information on statutes, policies and practices affecting pension fund investments in 1974–75. These two surveys, taken together, provide a considerable breadth of data for research in the area of public employee retirement systems.

B. Microsimulation Models Used in Retirement Income Analysis

Throughout this chapter, reference will be made to several existing microsimulation models which use (or will use) as their input some of the data bases described above. A microsimulation model is essentially a set of coded computer statements which replicate the rules and regulations of existing or proposed taxes, pensions, social insurance and/or welfare programs, combined with a set of similarly coded assumptions about individual behavior and demographic and economic change. Input files which contain data on individuals, families, or households (i.e., microrecords) are passed through this set of coding to provide estimates or projections of costs, program eligibles or participants, and income distributions that can be calculated at varying levels of aggregation.

These simulation models have been used to investigate various issues with respect to income tax and transfer programs, and they will continue to be crucial in future research. Some of the research topics described in this chapter will rely upon such models as the principal tool of analysis. A brief description of several of these models follows. (While not described here, there are other micro- and macromodels that generally are narrower in scope in that they focus upon a particular program or subset of programs. Such models are of

great use in an analysis of individual programs; however, they are limited in their ability to examine numerous programs simultaneously and therefore cannot model important program interactions.)

1. DYNASIM/MICROSIM

DYNASIM (dynamic simulation of income model) was developed at The Urban Institute. A version of this model was adapted by the Hendrickson Corp. and renamed MICROSIM. Both models use microsimulation techniques which simulate year-to-year changes in socioeconomic characteristics of sample members by applying estimated behavioral relationships to individual units. The models are well suited to long-term projections. The DYNASIM model simulates the rules of major income transfer programs,[3] with the primary use of the model having been analysis of retirement income issues. DYNASIM includes detailed simulations of private pension and social security benefits and the SSI program.

2. TRIM/MATH

The transfer income model (TRIM) and the microanalysis of transfers to households model (MATH) were designed to answer questions relevant to the formation of social welfare policies. TRIM was developed at The Urban Institute and later adapted, revised, and renamed MATH by Mathematica Policy Research. The core of both models is the set of modules which apply income tax and transfer program rules to the characteristics of individual households in a survey and calculate program outcomes by aggregating the individual outcomes. The sample can be projected to reflect a later year than the survey year by changing the sample weights to reflect changing demographic and economic characteristics of the population. This technique is static (unlike the dynamic procedures used in DYNASIM/MICROSIM) and is more reasonably confined to short-term projections. The major advantage of these models is in their simulation of needs-tested income transfer programs.

The four models described above use currently existing data bases and are therefore subject to the limitations imposed by the data. The models' capabilities will be enhanced as improved data sets become available. In connection with this, an ongoing research project at The Urban Institute will investigate the improvements which can be made in the four models described above as a result of the introduction of the SIPP data bases.

It is obvious from the discussion of the previous sections that the range of researchable issues is largely constrained by the availability of data. The following section discusses some of these research limitations imposed by data gaps.

C. Limitations on Research Imposed by Data Gaps

The range of policy issues which can actually be subjected to research is defined primarily by the availability of data and appropriate estimating procedures. Therefore, a key determinant in developing a research agenda is the existence of the necessary tools of analysis.

[3] The MICROSIM version does not presently incorporate the ability to simulate transfer programs.

Numerous examples may be cited of relevant research issues which cannot be studied comprehensively because of data constraints. Four such examples will be presented here.

Perhaps the major reason underlying the establishment of a mandatory retirement age and pension provisions which encourage early retirement is the belief that declining productivity accompanies old age. This is a widely held tenet with far-reaching impact. Yet the only empirical test of this hypothesis is a series of reports produced by the Bureau of Labor Statistics in the late 1950's. These studies reported a wider divergence in productivity within age cohorts than across age cohorts—that is, productivity declines are unrelated to the aging process—but the results are questionable for several reasons connected with data limitations.

The 1950's data were collected on a cross-sectional basis; that is, the productivity of younger workers and older workers were compared at a single point in time. Thus, it is unclear whether the observed productivity reflects the impact of age per se or the impact of differing attributes (e.g., educational levels) of different age groups. Another conceptual problem connected with past data sets is the problem of selectivity. Presumably, less productive workers are eliminated from the labor force over time, and the measurement of job performance with relation to age does not control for this factor. However, even ignoring these problems, the passage of time has rendered these findings obsolete.

Thus, we are faced with a question of prime importance—does productivity decline with age—and no research on which to base a firm conclusion. If advancing age does entail a loss in productive capacity, the argument for the continuance of early retirement practices or mandatory retirement provisions is strengthened. However, if productivity declines are not linked to aging, such practices may be robbing the labor force of its most experienced, productive workers.

However, despite the importance of this issue, the research has not been undertaken and most certainly will not be undertaken in the near future due to a lack of data. No existing data set is capable of providing the information required for such an analysis, and no such data collection effort has been proposed. In order to properly gage the impact of aging on productive capacity, longitudinal surveying techniques must be used to measure productivity at various points in an individual's lifetime. The survey design and data collection required to undertake such an analysis would be extremely complex and prohibitively expensive.

A second area where data constraints limit research capabilities is in the area of intrafamily transfers. The contribution of shared living arrangements and intrafamily transfers of wealth or income to the economic well-being of the aged is an important topic. However, the research to date which has investigated such transfers has been speculative and sketchy due to data insufficient to support a comprehensive research project. It would be very difficult to obtain reliable data on a national sample, since intrafamily transfers are often not well documented, hard to measure, and easily obscured by the donor. An analysis of the extent and magnitude of intrafamily transfers is important if one is to comprehend the economic status of the aged and the

true incidence of burden resulting from provision of adequate income to the elderly. There is also a need to investigate incentives or disincentives for such private transfers inherent in the public transfer programs. Each of these research issues must be postponed until better data are obtained.

A third example involves an evaluation of the long-range impact of immigration on employment opportunities and retirement programs. While policy analysts have written numerous articles concerning the projected impact of the changing demographic composition of the population on employment opportunities and retirement programs, none have addressed the impact of immigration (both legal and illegal). As a result of recently falling birth rates, an increasing percentage of the net change in population has been attributable to new immigration, even excluding the impact of illegal immigration, temporary workers, and foreign students. Research projects which investigated the size and composition of the immigrant population and projected trends in net immigration would substantially improve our knowledge of the influence of this component of population change on employment opportunities and retirement programs. However, such research will not be forthcoming unless methods are devised to obtain reliable data on the total immigrant population.

One final example of the constraints on research imposed by data limitations involves the lack of information on the "underground economy." It is a widely accepted view that many older persons receiving social security retirement benefits are employed and receive their earnings in cash to avoid loss of benefits resulting from reporting earnings to social security in excess of the limit imposed by the social security retirement test for full-benefit eligibility.

Estimates of the extent and cost of this evasion vary widely, nor is there any information on the composition of the population whose earnings go unreported. Given the illegality of such practices, it is unlikely that such data will ever become available. We are therefore confined to sketchy estimates of the cost and number of participants in this evasion and cannot conduct a truly comprehensive analysis of the impact of the social security retirement test or other such financial retirement incentives.

The above are just four examples of the limitations data gaps place on research. Numerous other examples could certainly be identified, but these four serve to illustrate the influence of data availability upon the development of a research agenda.

II. IDENTIFICATION OF PRIORITY RESEARCH ISSUES

A. Research on Issues of Benefit Adequacy and Fairness

The policy issues listed in chapter 1 as issues of benefit adequacy and fairness cover the current adequacy of retirement income and benefits for the aged, the adequacy of such income and benefits over time, and the fairness of treatment of various population subgroups, particularly women and minorities. The research topics related to these issues that represent the top priority for further work are discussed below.

1. MEASUREMENT OF AN ADEQUATE REPLACEMENT RATE

Social planners have long been concerned with providing an acceptable rate of replacement of earnings for older workers after retirement. Yet, the conceptual validity of "replacement rates" as generally defined remains open to question on an operational basis. The term "replacement rate," as most often used, refers to that portion of a retiree's prior earnings which is replaced by social security and other pension benefits. Such a definition is limited in scope in that it takes into account only the proportion of retirement cash benefits to preretirement gross earnings. Such a ratio is not indicative of the real disposable income pre- and postretirement which is available to a given individual. A more exact measurement of income might take numerous other factors into account.

For example, remuneration for work typically involves more than simply wages. Many employees receive in-kind benefits such as subsidized coverage under health and life insurance plans, the opportunity to invest in profit-sharing plans, or the benefit of preferential financial treatment from company credit unions. On the other hand, employment entails expenses, many of which are mandatory in nature, such as payment of income and payroll taxes. Union dues, commuting costs, and other work-related expenses are also part of the costs of employment. Both the work-related benefits and costs are usually terminated upon transition in labor force status from worker to retiree.

The measurement of replacement rates, narrowly defined, does not take these items into consideration. A replacement rate calculation which did consider these items would calculate preretirement income as net earnings plus the value of in-kind work-conditioned benefits and compare it to postretirement benefits under the applicable tax treatment and allow for changes in expenditures typically associated with retirement.

If the determination of an adequate replacement rate is a valid societal goal, then a high priority research agenda should include an analysis of the conceptual framework underlying the "replacement rate" notion and an empirical investigation of the impact of alternatively defined rates. Such a project could be undertaken with the use of a longitudinal data base such as the LRHS, which provides data on preretirement earnings and work-related expenses and on postretirement benefit levels. Data on in-kind employment-conditioned benefits may not be sufficiently comprehensive on the LRHS to permit reliable estimation. However, additional data sources might be utilized to impute such data to the LRHS file.[4] Some analysis using the LRHS of how expenditures pre- and postretirement differ has just been completed, but further refinement of that work, both in terms of comprehensiveness of expenditure categories covered and in relating expenditure change to replacement levels, could be undertaken.

Another important aspect of replacement rate measurement is temporal. Typically, replacement rate analysis has the new retiree as its reference point in judging the performance of a pension system. However, given the wide range of benefit adjustments applied by different systems after retirement (from semiannual CPI adjustments

[4] For example, the Department of Labor publishes data by occupation code on the proportion of earnings which wage supplements (health insurance, etc.) represent.

in Federal employee pension systems to no regular adjustment in a great many private employer plans), and the increasing average length of life in retired status, methods to judge changing income replacement over time should be reviewed. Such a consideration raises the question of how expenditures may change for the aged after retirement and into very old age (a period not covered by the LRHS). Whether or not a special aged version of the CPI should be used in measuring replacement and/or adjusting benefits should also receive further investigation.

2. EVALUATION OF THE CAUSATIVE FACTORS UNDERLYING RETIREMENT INCOME PROBLEMS

In order to address existing retirement income problems effectively, one must first identify the cause of the problems. Retirement income problems may entail both situations in which individuals receive inadequate retirement income and others in which individuals receive more than is actually required to maintain a previous standard of living. The latter problem may arise as a result of overpensioning. Military personnel, for example, often retire with full pensions plus social security coverage at age 45 and still have 20 years or more in which to earn pensions under other public or private plans.

Inadequate retirement incomes may be tied to several causative factors. Inadequate retirement income may be the result of an erratic work history, inadequacy of pension coverage, lack of adjustment of wage credits or retirement benefits for inflation, job mobility and nonportability of pension plans, limitations on survivor benefits, or it may simply be the result of inadequate planning on the part of the retiree.

The measures which could be taken to resolve retirement income problems (problems of both inadequacy and excess) vary drastically according to the causative factor. An assessment of the roots of the problems is vital if effective solutions are to be found.

B. Research on Financial Issues

The policy issues identified in chapter 1 as issues of financing retirement income and financial impacts of pensions are as follows:

(1) The adequacy of pension plan financing.
(2) Methods for sharing the costs of retirement income provision.
(3) The impact of pensions on saving and investment; and
(4) The fiscal policy implications of population aging and methods used to finance retirement income.

The research topics related to these issues that represent the top priority for further work are discussed below.

1. IMPACT OF A VALUE-ADDED TAX (VAT)

The attention given the idea of a value-added tax by Senator Long and Representative Ullman has elevated interest in its ramifications, but little research has been done on VAT in the context of the American economy and tax system. While VAT is basically a general public finance issue and not a retirement issue, it is included here because the congressional interest in it has been generated mostly by concern about the level of the social security payroll tax.

Research on VAT should consider its potential impacts in the context of other tax changes that might be expected to accompany such legislation. These other changes include: Reductions in the OASDHI tax rate and/or wage base, reductions in income tax rates, tax breaks for investment income, and expansion of the earned income tax credit for low-income wage earners. Research on variations in VAT itself with respect to rates and exemptions applied to specific goods and services is also needed.

There are at least three major objectives in research on VAT and related tax changes. First, it is important to know how such proposals will impact the distribution of income among individuals and households relative to current tax laws, both in the short run and over time, to identify which groups are better or worse off financially and how various measures of social impact are affected (e.g., size of poverty population, progressivity of taxes singly and in combination, income distribution among population quintiles). Short-run analyses can be accomplished with existing data and the TRIM or MATH microsimulation models. Analyses of longer run implications could also be undertaken with existing data and the DYNASIM model. However, further behavioral research (see below) and better data on assets (see discussion in section II) would greatly improve our understanding of how these potential shifts in taxes would ultimately affect household income.

The second objective of this research on VAT would be to estimate the behavioral consequences of such tax changes. By increasing taxation of consumption and reducing wage taxation and/or taxation of investment income, the following types of behavioral change might be stimulated:

(a) Shifts in consumption from taxed to untaxed goods.
(b) Reduction in consumption and increased saving.
(c) Shifts within an expenditure category from higher to lower-priced goods.
(d) Increased work effort and labor force participation.
(e) Increased hiring for part-time work; and
(f) Shifts in yields on different investment instruments.

Of these six areas of interest, which probably do not constitute an exhaustive list, the impact on saving versus consumption is the most important in terms of the need to improve our understanding of behavioral response, and it is an area of great relevance to the appropriate mix of public and private provision of retirement income in the future.

A third research objective is to examine the potential consequences of VAT for State and local finances. Reducing Federal taxation of investment income would lower the attractiveness of State and local debt instruments to investors and thereby raise the cost of borrowing by States and localities. Should VAT result in a more regressive Federal tax structure, State and local governments might find themselves pressured to reduce their reliance on sales taxes and to adopt a more progressive tax structure. Such impacts could result in behavior by State and local governments that would offset, at least partially, the intent of the Federal tax changes. The most likely State/local responses to VAT should be reviewed in terms of how they would affect the estimated impacts of the Federal tax changes.

Finally, the macroeconomic implications of VAT are an important subject for study. Given the anticipated individual and institutional responses, it would be expected that prices, employment, investment, and economic growth would be affected. These effects are important inputs for the long-run study of impacts on individuals as well as being valuable direct measures of the value of such a policy change.

2. ADEQUACY OF PENSION FUNDING UNDER DIFFERENT ECONOMIC SCENARIOS

Social security financing is set based on long-range economic and demographic trends assumed for a 50- to 75-year period. However, financing is on a pay-as-you-go basis, and a long-range plan is vulnerable to short-term economic disruption, a circumstance now occurring for the second time in this decade. While private plans are advance funded, short-term economic circumstances can compel changes in pension plans that require revised funding plans or special funding on a separate basis. Given recent experience with inflation, an unemployment rate that has remained at or above 6 percent almost every month in the past 5 years, and great uncertainty over future energy sources and prices, the vulnerability of social security, private plans, and public employee plans (which include both advance-funded and pay-as-you-go plans) under different economic scenarios deserves more attention.

In the case of social security, a number of options to the current financing plan are being discussed, usually involving reduced reliance on the payroll tax in favor of a new tax (e.g., VAT, oil windfall profits tax) or general revenue contributions based on various formulas. Examination of these different financing approaches is needed, including options specifically geared to be triggered by certain economic events such as high unemployment. This analysis should be conducted for a wide range of economic scenarios, with the interaction between the particular financing method and the performance of the economy explicitly taken into account. The objective of the analysis would be to determine how to obtain the broadest degree of insurance against an economic deterioration of the social security trust fund balances for the least investment of tax resources.

For employer pension plans, the principal economic threat currently is the impact of inflation on the real value of benefits, since few if any plans make regular adjustments that keep pensions fully protected against inflation. Projections of pension costs are needed for various approaches to inflation adjustments under a broad range of economic scenarios. Of particular interest in the analysis of private plans is the likely performance of pension fund assets vis-a-vis the rate of inflation under these scenarios.

3. INTERGOVERNMENTAL FISCAL IMPACT OF POPULATION AGING

It is a well-known fact and of considerable concern that Federal spending will rise sharply as the population grows older unless current budget policy is revised with respect to aged benefits or some other governmental activity. However, while public spending on aged benefits has become essentially a Federal function—with certain exceptions

(State/local employee retirement systems, State supplementation of SSI benefits, State matching of medicaid payments)—States and localities continue to provide the bulk of the expenses of public education (over 80 percent), they pay close to half the welfare aid to needy families with children, they account for nearly 90 percent of the costs of the criminal justice system, and they operate and share in the costs of employment and training programs, social services, and family health care services. Thus, spending related to the population of children and youth and families with dependent children accounts for over half of all State and local expenditures but only about 10 percent of the Federal budget. More nationwide data and analysis are needed on the budgetary implications and impacts on the quality of government services of a dwindling number of young people.

Since an aging population will increase Federal spending, it is often assumed that a declining proportion of children, youth and younger workers will lessen demands on State and local budgets. However, with all this budget-making occurring in thousands of disconnected decisions, there can be no assurance that such intergovernmental tradeoffs will be made.

However, even an explicit tradeoff of less State/local for more Federal spending based on the redistribution of the population by age group would not likely hold overall public costs of aid to dependent groups to current levels. Several factors may deter any substantial offset to increased spending on the aged. First, aged dependents cost more to support than children, especially if the aged become more female and more minority. And most support for children still comes from their families rather than from public funds. Second, advocates of children will continue to make strong arguments that greater efforts are needed to end poverty, improve education, and improve maternal and child health care, and that there is a bigger payoff to society from long-run investments in children than from maintenance of the elderly. If crime declines with aging, prison expenditures may not follow, since sentences could be lengthened and/or the quality of penal institutions improved. Third, it may turn out that a decline in the relative size of the child population will not result in a proportionate reduction in the real need for public aid of this group since it will be composed more of minority children. Fourth, the assimilation of families of millions of illegal aliens could also occur in the future, thereby raising the need for public support of children. And finally, the fertility rate could rise above the replacement rate of 2.1 and change the population age structure the Census Bureau now projects. Thus, it is not at all obvious that the projected rise in Federal spending for the aged will be accompanied by a relative decline in State/local spending for children and youths.

Research on this subject should begin with projections of the nonaged population under several assumptions about fertility and immigration. State and local costs associated with this population could be determined for income security and health care financing programs by use of the DYNASIM microsimulation model. Several assumptions regarding program improvements (e.g., elimination of below-poverty income for recipients, universal coverage of low-income people by welfare) could be simulated as well as current policy. For other governmental sectors (e.g., criminal justice) special studies might be needed, applying different levels of service quality to the several population

data bases generated by the various demographic scenarios. The objective of this study would be to estimate the variations in State and local spending due to population aging for a range of policy and demographic scenarios.

4. DETERMINANTS OF FUTURE PENSION OFFERINGS

A decision by a firm or industry to offer its employees participation in a pension plan results from consideration of a number of factors. The fact that pension coverage appears to have leveled off, and the existence of various external pressures on pension plans, have prompted considerable interest in what future developments in pension offerings might be. Current factors that may determine future pension offerings include:

—The impact of rising social security taxes, benefits and covered earnings already legislated, and the automatic inflation adjustments.
—Cost increases associated with the existing provisions of ERISA.
—Creation of the PBGC by ERISA, permitting financially troubled plans to terminate and have part of their liabilities covered by an insurance pool.
—Union bargaining and the degree to which certain types of pensions have become institutionalized in certain industries.
—The liberalization of mandatory retirement age limits.
—Higher rates of inflation, lower real economic growth, and looser labor markets than in the 1960's era of rapid pension plan growth.
—The profitability of various classes of firms.
—The existence of individual retirement accounts (IRA's) as tax-exempt alternatives to formal pension plans.
—Reliance on profit-sharing plans as a source of retirement income; and
—Trends in public employee plans and their impact on private-sector employee expectations and union bargaining.

In addition possible public policy responses to widely perceived pension problems will greatly impact future pensions offerings. Such public policy initiatives could include:

—*Expansion of social security wage replacement.* To assure more people adequate retirement incomes, proposals for higher wage-replacement under social security could be offered, which might significantly reduce the need for private pension coverage for middle- and upper-middle income workers. The greater cost of social security would detract from funding available for private pensions and would substitute for private thrift.
—*Additional payroll taxation.* Independent of the above point, social security tax increases may be proposed for several reasons (to cover the projected trust fund deficit, to pay for national health insurance, or to provide a new social security benefit such as homemakers' coverage). Such taxes increase payroll costs and reduce employer funds available for pensions. An option to a payroll tax increase that will be considered is the establishment of a new tax such as a value-added tax, which would impact the private sector but in a manner quite different from a payroll tax hike, in that consumer demand might be affected more than employee benefits and compensation.

—*Extension of Federal regulation.* Further regulation of private pensions may be proposed. The most likely ultimate goal of further regulation would be to use private plans as part of a national system with universal coverage of all jobs by a combined social security-employer pension that would provide completely portable credits with early vesting and indexed benefits.

—*Revisions in tax treatment of retirement plans.* The tax system could be used to induce further utilization of individual retirement accounts in lieu of pension plans. Also, the tax code provisions that define plans qualified for tax exemptions of earnings and employer contributions could be modified to force a restructuring of pension benefits or to achieve at least partially the goals of further regulation cited above.

—*Encouragement or compulsion of later retirements.* Given the aging of the population, the rising costs of social security, and the rising interest of older people in continuing to work, proposals can be expected to compel an increase in the normal retirement age or to induce later retirements. Since many private plans now encourage early retirements, such a public policy might force a redesign of private plans. If significant extensions in individuals' working lives were realized, especially if coupled with higher social security benefits, the need for private pension coverage could be greatly diminished.

The ability of pension experts to predict the net result of all these forces for pension offerings is quite limited. In general, however, developments that increase pension costs to employers, that provide employees with greater options for retirement income, or that weaken the institutional and market forces promoting pension offerings will retard future expansion of coverage or even diminish present coverage. Conversely, a potential combination of factors such as tight labor markets, continued encouragement of pensions through tax laws, and a constrained or diminished role for social security could stimulate renewed growth in pension offerings. Research is needed to develop estimating models to predict firm behavior under a variety of circumstances. Policymakers cannot take into account the full impact of new policy initiatives on retirement income without a better method of prediction of the private pension sector's responses to changes in public laws and regulations.

C. Research on Employment Issues

The policy issues listed in chapter 1 as issues of employment and retirement of older workers are as follows:

(1) The appropriate retirement age; and

(2) Potential for labor market scarcities and/or surpluses under current trends and policies.

The research topics related to these issues that represent the top priority for further work are discussed below.

1. Measurement of Incentives for Labor Force Withdrawal

Experience with inflation and the gaps in private pension coverage suggest that retirement benefits may be much less adequate in the future than once thought. At the same time, increases in longevity

and a decline in the proportion of the population in the work force make it uncertain whether even current inadequate benefit levels can be financed. Thus, policymakers are torn between two powerful forces. On the one hand, there is substantial public pressure to reduce poverty among the aged, provide greater protection against inflation after retirement, and ensure adequate benefits to all workers regardless of their patterns of lifetime employment. On the other hand, no tax source can be tapped to finance current benefit obligations, much less further benefit liberalizations, without incurring the wrath of taxpayers.

In response to this dilemma, some policymakers and analysts have proposed increasing the retirement age. However, legislation to compel this would be controversial and perhaps politically unfeasible. A more acceptable way to resolve the policy dilemma, without excessive tax increases or unpopular benefit reductions, would be to develop strategies to encourage, but not compel, healthy older Americans to work past age 62 or 65 or to retire only partially at those ages. This approach would allow the same amount of funds to be paid to individuals over shorter retirement periods, hence larger monthly benefits could be afforded.

Unfortunately, finding workable methods to encourage extended labor force participation by older Americans may not be easy. The current system of public and private retirement programs, the welfare system and the tax system all provide substantial financial incentives for early and full retirement. If these incentives are to be reversed, their full impact must be understood, policy options to reverse them must be developed, and proposed policy options must be evaluated using the best available knowledge of the impact of financial incentives on the timing of retirement.

Research now underway at The Urban Institute will catalog the financial incentives for early or normal age retirement imbedded in the private and public programs which affect the incomes of older Americans and examine the major interactions among programs to identify detrimental cumulative impacts.

Additional research will be needed beyond the present effort in order to estimate the probable number and ages of workers affected by each program singly and in combination. Available data on program participation and work histories would be quite useful and will soon be augmented by data from the new surveys of income and program participation. Once such an analysis is done, policy options for changing the incentives of programs with or without reductions in expected lifetime benefits, can be tested.

2. FURTHER ANALYSIS OF RETIREMENT BEHAVIOR

There has been a great deal of research on the determinants of the retirement decision. Recently, analysts have begun to tap the longitudinal data on older workers provided in the longitudinal retirement history survey to improve on earlier studies. Despite the extensive body of research in this area, its importance to the critical issue of the appropriate retirement age policy in an aging society suggests that the existing research gaps should be filled.

There are five topics where further research on retirement behavior seems most crucial:

(a) *Effects of cumulative marginal tax rates on labor force participation by older workers.*—Studies of the behavioral impact of marginal "tax rates" on earnings (i.e., reductions in net income from taxes and from reductions in benefits as earnings rise) have generally dealt with only one provision, the social security retirement test being the primary subject of this analysis. Broader studies that take into account welfare and unemployment benefits, employer pensions, health benefits, and income and payroll taxes are needed.

(b) *Joint retirement behavior in two-earner families.*—With increasing labor force participation by women and interest in social security and pension reforms directed toward the treatment of women, more research on the retirement behavior of older workers with working spouses is needed. Data on two-earner couples' work histories have been limited, but some initial research is underway and should be built upon.

(c) *Effects of pension information on retirement behavior.*—Surveys indicate that most workers, even older workers, have little knowledge about the workings of social security and employer pension plans and have planned inadequately for their retirement. Retirement behavior might be greatly affected by better information on current pension credits, eventual retirement income under different possible work histories, and income needs over the entire retirement period. The behavioral impact of increasing the level of understanding is a matter of considerable interest to researchers and policy analysts.

(d) *Interaction of health status and retirement behavior.*—Research has indicated that poor health is a key factor in older workers' decisions to retire. However, there may be a corresponding impact of retirement on health; i.e., early retirement may increase the likelihood of a person's developing certain health problems. This potential effect has consequences both for an understanding of earlier studies and for the costs to society of early retirement and should be investigated.

(e) *Employment patterns after pension acceptance.*—There is a sizable job market for secondary jobs after pension acceptance, especially part-time jobs. While some new research on this subject may soon be funded by AoA, there will still be a great need to understand better the workings of this market in terms of who is in it, why, what their job histories after pension acceptance are, how secondary jobs impact current and future income and health status, how large a demand for such work can be met, and the nature of current and potential secondary work.

3. EFFECTS OF RETRAINING OLDER WORKERS FOR SECOND CAREERS

If working lives are extended, or if labor force participation after pension acceptance increases, there will be a need to consider large-scale efforts to retrain older workers for new careers. Retraining these workers could enhance the productivity of the labor force, facilitate mobility of older workers with obsolete skills, enable labor force reentry for pensioners closed out of lifelong occupations by pension rules, and impact the economic and social well-being of the most rapidly growing segment of the population.

Research in this area should focus on: (1) Projections of the need for retraining under alternative scenarios for trends in retirement behavior; (2) projections of training resources available to meet this

need under current circumstances and under policies designed to stimulate development of such resources; and (3) determination of the likely occupations to target retraining efforts on given projected labor force needs and current performance of older workers who have made transitions from primary to secondary careers.

4. INTERACTION OF RETIREMENT POLICY AND ECONOMIC GROWTH

Any effort to increase labor force participation by older workers, if successful, will have macroeconomic consequences. Such effects will result from different demand patterns, a different mix of labor by experience level and industry, reductions in income transfer payments and the accompanying payroll taxes, and different savings rates. These factors help determine aggregate demand and employment, prices, and economic growth, which in turn determine the size of the labor force within which increasing numbers of older workers will compete for jobs.

To date, the macroeconomic aspects of retirement policy have received far less attention from analysts than have the microeconomic factors involved in individual retirement behavior. This imbalance can be addressed by incorporating a macroeconomic model into dynamic simulations of retirement behavior under alternative retirement policies. Such research could indicate the interactions between the aggregate economic measures and policies to influence individual behavior and help determine the feasibility of such policy options in terms of impacts on fiscal policy and the economic well-being of the aged.

D. Research on Issues of System Coordination and Design

The policy issues identified in chapter 1 as issues of system coordination and design are as follows:

(1) Determination of the proper mix of public and private provisions for retirement income.

(2) Extension of Federal control over public employee retirement plans.

(3) Revision of the social insurance approach to old age income security; and

(4) Implementation of major changes in retirement policies and benefit systems.

The research topics related to those issues that represent the top priority for further work are discussed below.

1. PROJECTIONS OF RELATIVE ROLES OF VARIOUS SYSTEMS IN PROVIDING RETIREMENT INCOME

The original idea behind the development of the social security program was that social security would provide minimum income security in old age for as many workers as possible with private pensions and private savings supplementing this base. Welfare programs were expected to disappear as the system matured and increasing numbers of workers were covered. In fact, what exists today is a "three-tier" system composed of social security, the needs-tested transfer programs, and employer pensions. Increased concern over program costs and retirement income adequacy has heightened the

importance of understanding the relative role of each component of this three-tier system.

There has been little in the way of comprehensive projections of these three components over time. A key research topic, therefore, should be a projection of the benefits that will be produced by the existing systems over the next 20 to 30 years. Such projections are needed to assess the likelihood that inadequacy of retirement income will be a major problem in the long run and under what circumstances. The current system could prove more adequate for future generations of retirees than we suspect. On the other hand, projections may indicate a socially unacceptable outcome with some workers receiving large benefits while others with similar earnings receive little. Such projections would greatly enhance our knowledge of the expected outcomes for persons under the existing mix of retirement income sources. Without this knowledge, intelligent decisions as to the continuance of the existing system or adoption of major system reforms cannot be made.

Projections of this type are well suited to DYNASIM (with the use of existing or proposed data bases), since the model can make long-term projections and simulates social security, private pensions and the needs-tested transfer programs.

2. INTERACTIONS OF PENSION AND UNEMPLOYMENT BENEFITS

This topic involves two central questions: (1) How does the availability of unemployment benefits alter the retirement patterns of older workers; and (2) to what extent are pension recipients also receiving unemployment benefits.

Older workers do not generally experience more spells of unemployment than do their younger counterparts; however, the duration of the spells which they do incur is generally much more prolonged. There is evidence to suggest that many older workers who are receiving unemployment compensation benefits actually consider themselves partially or fully retired. In many cases, the availability of unemployment compensation benefits is treated by recipients as a form of early retirement. This, of course, is not the intent of the unemployment compensation program, and such benefit availability may undermine the retirement incentive structure built into the pension plans.

In a related manner, many elderly individuals simultaneously receive benefits under both unemployment compensation and private pension plans, also contrary to the intent of these two programs. Prevention of such overlaps is a current issue in Congress. An assessment of the extent of interaction and overlap across these two programs is essential if an accurate picture of the employment and retirement income problems of the elderly is to be obtained. Once again, DYNASIM, which can model the operation of the unemployment compensation program, could be a valuable tool in the conduct of such an analysis.

3. IMPACTS OF EXTENDING AN ERISA-TYPE LAW TO STATE AND LOCAL EMPLOYEE PENSION PLANS

Enacted in 1974 to improve the reliability and adequacy of the private pension system, ERISA applies Federal standards to plans with respect to vesting rules, funding standards, financial reporting

and disclosure, and portfolio management, and establishes a system of insurance protection for participants in terminated plans. Legislation to establish ERISA-like Federal standards for public employee pensions has been introduced in the U.S. House of Representatives. A topic of prime concern, therefore, is the impact such a law might have on State and local pension plans. An analysis of the anticipated impact upon program costs, vesting provisions, funding options and plan terminations is necessary if an informed decision is to be reached. Proposed surveys of pension plan coverage and benefit receipt coupled with existing data on individual plan designs should provide sufficient data to evaluate the impact.

4. IMPACT OF TAX REFORMS ON PRIVATE SAVINGS

Various tax incentives have been legislated to induce greater levels of private savings for purposes of providing retirement income, and new proposals abound. Self-employed individuals are extended tax privileges to set up Keogh retirement plans, and individuals employed in firms which do not have a pension plan are accorded similar tax privileges in establishing individual retirement accounts (IRA's). Information about the impact of these plans is scarce. There is little knowledge of what proportion of the eligible population has actually established an account, the composition of the subgroup which has done so, and the long-range impact these plans may have on pension plan offerings. More information is needed on other nonpension forms of retirement savings as well, such as company thrift plans and employee stock ownership and profit-sharing plans.

An assessment of the extent and nature of participation in these alternatives to pensions is necessary if the effectiveness of tax incentives in inducing personal savings, their effectiveness in providing adequate retirement income and their relative role in the multitiered system of retirement income and benefit programs is to be evaluated. Such a study could be undertaken with the use of data obtained from the survey sponsored by the President's Commission on Pension Policy and the employer/employee survey sponsored by the Department of Labor.

5. IMPLEMENTATION OF CHANGES IN RETIREMENT INCOME SYSTEMS

While numerous broad-sweeping reform proposals have been offered (e.g., universal social security coverage) insufficient attention has been paid to the means by which such wide-ranging changes could be implemented. The key issues involved in assessing the appropriate implementation methodology include: (1) Selection of a method which insures the least administrative cost and beneficiary financial loss for different transition periods; (2) analysis of the costs inherent in alternative transition proposals; and (3) analysis of the distributional impacts which would occur under alternative schemes. If serious consideration is to be given to altering the existing mix of pensions, social security and needs-tested benefit programs, then serious consideration must also be given to the appropriate means for effecting such a change. DYNASIM could be used to perform such an analysis.

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6. IMPACT OF JOB MOBILITY ON PENSION ENTITLEMENT

Incomplete coverage of career earnings or final earnings by the combined credits earned under social security and employer pension plans is a problem faced by a good many workers and results in inadequate retirement incomes and inequities among workers when grouped by sex, race, and occupation. This incomplete coverage stems from four factors: (1) The ceiling on covered wages under social security; (2) the lack of private pension coverage for a large number of jobs; (3) the lack of portability of pension credits for those who change jobs; and (4) the lost value of credits earned in a job vacated before retirement age in systems where prior-year credits are not indexed up to the year when normal or early retirement age is reached. The latter two points are probably a more significant problem than the first two since they impact a huge proportion of the work force (viz, those who hold several different jobs over their lifetimes).

There is a need for a comprehensive study of the extent to which coverage of real wages will be incomplete in the future under the now mature systems of social security and private pensions. The methodology already exists for such projections and is in the process of being improved under a contract with the U.S. Department of Labor. Such projections could pinpoint the likely loss of retirement income owing to incomplete wage coverage by socioeconomic categories for a cohort of workers who will retire near the turn of the next century.

Chapter 4

POLICIES AFFECTING THE INCOME AND EMPLOYMENT OF OLDER AMERICANS: A REVIEW OF OPTIONS FOR CHANGE

In chapter 1, this information paper described the complex of major issues confronting policymakers concerned about the income and employment of older Americans. Basically, these policy issues may be categorized as issues of: (1) Benefit adequacy and fairness; (2) benefit financing; (3) employment and retirement; and (4) system coordination and design.

With these major issues in mind, a wide variety of sources has been reviewed to determine the policy options that have been devised to deal with the problems posed by the issues. This review has covered bills introduced in the 96th Congress, reports of various government agencies and study groups, papers prepared by members of the research community, and position papers of interest groups. The information which follows synthesizes this massive amount of material in order to present the full range of ideas for policy change and how they are interrelated.

Section I of this paper summarizes the policy options identified by several government task forces and private scholars who have recently prepared policy options or recommendations for some major segment of the retirement income system. Specifically, section I covers the work of the 1979 Social Security Advisory Council, the HEW Social Security Universal Coverage Study Group, the HEW Task Force on Women and Social Security, the House Pension Task Force, and the President's Commission on Military Compensation. Also described are the provisions of several bills introduced in the 96th Congress, and the policy options described in two books on social security written by Robert Ball and Alicia Munnell, respectively.

Section II presents, in the form of an annotated outline, the full range of policy options reviewed, organized according to the four major categories of benefit adequacy and fairness, benefit financing, employment and retirement, and system coordination and design. Section III describes the positions advocated recently by the various interest group organizations active in seeking policy improvements with respect to the income and employment of the aged.

In conclusion, section IV discusses the conflicting objectives inherent in the policy options identified, the strategic choice posed of structural reforms versus incremental changes, and the implications of different economic trends for the importance of the various issues and options. Areas are identified where the range of current policy options seems to be too limited.

Considering the large volume of source materials and the rapidity with which new proposals are emerging in this area, it is unlikely that this paper includes a complete representation of all options for change. An effort has been made to reflect as many different ideas as possible, though all the specific variations proposed for a particular approach may be omitted in the interest of brevity.

One caveat that should be borne in mind in reading this paper is that the individuals whose names are associated with policy options may not currently advocate implementation of such changes. Often, ideas for change are raised in the context of research reports or issue analyses as options not necessarily favored by authors but regarded as worthy of further investigation. Such ideas are included in the following discussion. Even bills introduced in Congress may include provisions no longer supported by all the bills' sponsors. Thus, the focus of this paper is more to describe the nature of the approaches available for policy change than to identify current support of specific proposals.

I. MAJOR POLICY OPTION PACKAGES

From time to time, both Congress and the executive branch have initiated comprehensive policy reviews of a program or programs resulting from public policy concerns regarding income and employment of the aged. Recent years have seen a plethora of such study groups formed, several of which still have investigations underway. This section presents the recommendations of, or options studied by, the following groups:

—1979 Social Security Advisory Council.
—HEW Social Security Universal Coverage Study Group.
—HEW Task Force on Women and Social Security.
—House Pension Task Force; and
—President's Commission on Military Compensation.

The work of two currently active commissions—the President's Pension Policy Commission and the National Commission on Social Security—is not far enough along at this writing to describe the options those bodies will consider in their respective reports and recommendations due next year.

Also described in this section are several far-reaching proposals for social security reforms made by Members of Congress and by two private scholars. The congressional initiatives include: H.R. 14 (Conable); H.R. 764, H.R. 765 and H.R. 3588 (Stokes); H.R. 1851 (Frenzel); and H.R. 2650 (Green). The private studies reviewed here are Robert M. Ball's "Social Security Today and Tomorrow," and Alicia H. Munnell's "The Future of Social Security."

[NOTE: See end of this chapter for complete description of references.]

There are, of course, many other pieces of legislation, government studies, and academic papers that offer policy options for consideration. The options presented in these additional sources are outlined by major issue areas and subtopics in section II.

A. Social Security

1. THE 1979 ADVISORY COUNCIL

An Advisory Council on Social Security is required by law to meet every 4 years to report on the program and make recommendations on changes that may be needed. Business, labor, and public members are appointed to the Council by the Secretary of Health, Education, and Welfare. The 1979 Council has recently issued its report, and its recommendations are summarized below by major subject area.

a. Financing

The council believes that the financial soundness and equity of the system would be improved by financing at least part of social security benefits from general revenues. It also believes that the ad hoc increases in the earnings base (the maximum amount of earnings subject to social security taxes) enacted in 1977 should be repealed. Specifically, the council recommends:

—Financing the hospital insurance (HI) program (part A of medicare) entirely from earmarked portions of the personal and corporation income taxes, rather than from payroll taxes.

—Allocating part of the current HI payroll tax to the old-age and survivor's and disability (OASDI) cash benefits programs.

—Repealing the balance of the HI payroll tax.

—Repealing the ad hoc increases in the earnings base scheduled for 1980 and 1981. In the future, the earnings base would be increased only to reflect increases in the level of average wages.

The combined effect of these recommendations would be a significant reduction in the social security taxes scheduled to be paid in the next few years. The total tax rate for employers and employees (each) could be set at 5.6 percent. (Under present law, the rate for OASDHI is scheduled to be 6.13 percent in 1980 and 6.65 percent in 1981.) The earnings base would be $24,900 in 1980, rather than $29,700 as scheduled under present law, and $27,000 in 1981, rather than $29,700. If the economy proves less favorable than projected in the 1979 trustees' report, the appropriate tax rate may be somewhat higher than 5.6 percent.

If Congress does not implement the proposal to finance hospital insurance entirely from earmarked corporation and personal income taxes, the council recommends that, at a minimum, the increase in the HI payroll tax rate scheduled for 1981—0.25 percent for employers and employees each—be replaced with general revenues. Elimination of this increase alone would reduce the total (OASDHI) tax rate for employees and employers each in 1981 to 6.4 percent, rather than the 6.65 percent in current law.

To protect social security against economic fluctuations, the council recommends:

—Making payments to the trust funds from general revenues if reserves are less than 60 percent of annual outlays, in the manner proposed by the Carter administration in 1977, to help compensate the system for revenues lost because of high unemployment. This provision would reduce the need to raise payroll taxes

during a recession, reduce the level of reserves ordinarily needed for safe operation of the system, and introduce general revenues into the OASDI programs in a way that strictly limits their use.

—Authorizing the trust funds to borrow from the general fund if reserves fall below about 3 months' outlays. Repayment of such a loan would begin whenever the balance in the funds reached about 5 months' outlays. If the loan were not repaid within 2 years, then the council recommends that payroll taxes be increased automatically to repay the amount outstanding, provided that the national unemployment rate is below a specified level.

—Combining the old-age and survivors' trust fund with the disability insurance trust fund to permit revenue transfers between the two programs and avoid the need for legislative action to readjust taxes when one fund is low and the other is amply financed.

—Bringing the social security cash benefits programs into long-run actuarial balance by scheduling a payroll tax rate increase beginning in the year 2005.

—Rejecting the idea of using a new value-added tax to finance social security.

—Continuing current-cost financing, with reserve balances maintained at a level equal to about 75 percent of outlays to provide protection against a recession. (If the council's proposals for use of general revenues and borrowing authority during a recession were adopted, a reserve of 60 percent of outlays would be sufficient.)

b. Structure of social security benefits

Benefit formula.—The council recommends a revised benefit formula that would guarantee long-service workers with average earnings at or somewhat below the Federal minimum wage benefits at least equal to the poverty threshold. Under present law, a worker retiring at age 65 will receive a benefit that replaces 90 percent of the first $180 of his/her average indexed monthly earnings (AIME), plus 32 percent of the next $905 of AIME, plus 15 percent of AIME above $1,085. The new benefit formula would replace 61 percent of the first $442 of AIME, plus 27 percent of any additional AIME. The council also recommends liberalizing the special minimum benefit for those with long histories of work at low wages.

Taxation of benefits.—Because social security benefits are derived from earnings in covered employment, just as is the case with private pensions, the council believes social security benefits should be subject to taxation in the same general way that private pension income is taxed. This principle means that 83 percent of an employee's social security benefit (and 75 percent of a self-employed person's benefit) would be subject to taxation. However, the council recommends including only half of all social security benefits in taxable income.

Averaging period.—In calculating social security benefits, workers must count all years between 1950 or the year they turn 21 up until the year they turn 62, die, or become disabled. Five years of low or no earnings may be excluded from this calculation, but if a worker has more than 5 years of low earnings or of work outside covered employment, these low or zero years must be entered into the calculation.

Young workers may exclude a disproportionately high number of years from the averaging period because, by dropping 5 years from a work life as short as 7 years, their benefit can be based on only their two highest years of earnings. This policy results in higher benefits for young disabled workers and the survivors of young deceased workers than are awarded to older retired or disabled workers and their survivors. The council recommends that all workers be allowed to drop 1 year from the averaging period for each 6 years elapsing between age 22 and the age of eligibility for benefits.

Semiannual cost-of-living increases.—The council recommends that social security benefits be increased twice a year—in March and September—whenever prices have risen by at least 3 percent since the last cost-of-living adjustment was made.

Double-decker plan.—The council considered and rejected a double-decker plan under which each aged and disabled person and surviving child would receive a flat grant paid from general revenues, with an additional benefit directly proportional to past covered earnings paid to social security contributors but not to their dependents or survivors.

c. Women

The council concluded that a system basing social security benefits for couples on half a couple's combined earnings represents the most promising approach to addressing many of the issues related to women. However, the council did not endorse a full-scale earnings-sharing plan. The council felt that acceptable answers must be found for the issues raised by the specific plans developed so far. The council felt that earnings sharing would represent a fundamental change in the structure of social security and should not be implemented until it has been more widely debated and understood by those who would be affected.

However, the council did recommend two elements of a full-scale earnings-sharing system for immediate implementation: Persons divorced after at least 10 years of marriage would receive retirement benefits based on shared earnings from the years they were married, and aged widow(er)s would receive benefits based on the couple's combined earnings.

Under this limited form of earnings sharing, the credits gained or lost through sharing would not affect eligibility for either disability or survivor benefits, but these credits would affect the level of retirement benefits. Divorced women generally would receive higher retirement benefits and divorced men lower benefits on the basis of their shared earnings than they would receive under present law. Now, a divorced woman is eligible for a retirement benefit equal to only half her ex-husband's benefit. The second proposal would permit a survivor to inherit the earnings credits of his or her deceased spouse. All of the earnings credits of the deceased spouse that were earned in years during which the two were married would be added to the earnings credits of the surviving spouse. Thus, surviving spouses of couples where both partners worked would receive higher benefits than they would under present law, where the benefit is based only on the earnings of the higher paid spouse.

The council recommends that proposals to permit parents to drop one or more years spent caring for children from the averaging period be seriously considered.

d. Minorities

The council examined the allegation that members of minority groups fare less well than others under social security and concluded that it is unfounded. The council found that, looking at social security as a whole, benefit losses resulting from the shorter life expectancy of minorities are offset by the fact that minorities are more likely to receive disability and survivors' benefits. Also, the social security benefit formula provides workers with lower earnings a higher benefit relative to their previous earnings than is provided to those with higher earnings. Thus, as long as minorities continue to be paid less or to experience more unemployment than the average worker, the weighing in the benefit formula provides minorities the advantage of higher benefits relative to taxes paid than is true for others.

e. Disability

The council recommends that the disability definition to qualify for disability benefits be liberalized for those aged 55 to 60 by using the same criteria now applicable to those older than 60. The council recommends that HEW develop a definition of disability for the SSI program that is less strict than the definition used for social security.

f. Coverage

The council recommends that social security coverage be extended to all Federal employees, either through mandatory coverage of new employees or through credit transfers. Mandatory coverage is recommended for all new employees of State and local governments and nonprofit organizations. Until all workers are covered by social security, the council recommends as interim steps that:

—An earnings offset be instituted for those who have earnings under both social security and noncovered employment.

—All current and future agreements implementing coverage for State and local workers be made irrevocable. If this is not adopted, terminations should only be permitted after a vote of affected employees.

g. Retirement policy

The council recommends that consideration be given to enactment now of an increase in the retirement age to 68, effective after the turn of the century. It is argued that action must be taken in the near future if workers are to have ample time to adjust to a new retirement age.

The council recommends continuation of the actuarial provisions which allow retirement benefits to be drawn as early as age 62 (with an actuarial reduction for persons retiring before age 65). It recommends consideration of a special program to provide long-term unemployment benefits for those who are approaching the normal retirement age but are unable to find a job. Such a program would pay benefits until a worker turned 65, as long as he/she were willing and able to work, and would be sufficient to make it unnecessary for older workers to claim early retirement benefits.

The council recommends no increase in the earnings (or retirement) test for workers 65 or older but suggests that the earnings test for

those younger than 65 be increased so that it is the same as for those older than 65. The council felt that elimination of the test would help more those who need help least; thus, a relaxation of the earnings test should not take priority over other benefit improvements.

h. Administration cost savings proposals

The council rejected the cost savings proposals offered by the Carter administration in the 1980 budget. (These proposals are not included in the 1981 Carter budget.)

Those proposals would have:

—Phased out the regular minimum benefit more rapidly than would occur under present law.

—Provided the lump-sum death benefit only to SSI recipients and their survivors.

—Phased out benefits for students aged 18 to 22 who are children of retired, deceased, or disabled workers.

—Phased out benefits for mothers caring for nondisabled children aged 16 to 18.

—Eliminated benefits to young survivors of those who die after earning currently insured status but who had not yet earned fully insured status.

i. Private pensions and SSI

The council also recommends that serious consideration be given to improving the private pension system. It is particularly concerned about the problems of adequacy of coverage under private plans, the portability of pension rights, the updating of pension credits from prior employment, the unequal effect of many private pension systems on women workers, and the updating of pension benefits to take account of inflation after retirement.

The council also recommends the following improvements for the SSI program:

—Total benefits for all SSI recipients should gradually be brought up to the poverty line through the combined effects of social security, SSI, State SSI supplements, food stamps, and other income sources. As an interim measure, the council recommends that Federal matching funds be offered to States that raise their supplementary payment levels to the poverty line.

—SSI households eligible for food stamps should be paid the value of their food stamp allotments in cash.

—SSI resource limits should be updated and automatically adjusted each year for changes in the cost of living.

—The present disregard of $20 a month for unearned income should be updated—to about $30—and kept up to date with inflation automatically in the future.

—The value of household goods and personal effects, including the value of automobiles, should be disregarded in determining SSI eligibility.

The council recommended that serious consideration be given to:

—Providing benefits to needy spouses of SSI recipients when the spouse turns age 62 and to minor dependent children of SSI recipients.

—Liberalizing the one-third reduction in benefits to recipients who live in the households of others.

2. SCHOLARLY REVIEWS

The public debate that erupted in the early 1970's over the financing of social security and its suitability as a retirement income base in a rapidly changing society spawned a great deal of interest among the experts in how the system should be modified. Two such works that are particularly comprehensive in their treatment of social security issues are discussed below.

a. Alicia Munnell's book

Alicia H. Munnell, an economist with the Federal Reserve Bank of Boston, wrote on social security as a staff member of the Brookings Institution ("The Future of Social Security," Brookings Studies in Social Economics, the Brookings Institution, Washington, 1977). Since she wrote prior to enactment of the 1977 Social Security Amendments, some of the major issues she discussed were resolved in that legislation. However, the following conclusions she draws in her discussion of the issues are quite relevant to future debates:

—Munnell argues for a reduction in the "welfare aspects" of social security, eliminating the minimum floor on benefit amounts, eliminating dependents' benefits, and reducing the progressivity of the benefit formula. She urges more reliance on the means-tested SSI program, which could be liberalized by lowering the rate at which unearned income offsets SSI benefits from 100 to 50 percent.

—If a progressive social security benefit formula is retained, Munnell advocates revisions that will result in benefits more closely related to earnings for working spouses.

—Munnell argues for changes designed to increase labor force participation by older workers, although she feels more research is needed to select the best approach. Possibilities cited are to increase the rate of credits for delaying retirement past age 65, and liberalization of the retirement test for those who both work and draw benefits.

—Munnell prefers retention of payroll tax financing for social security, but with an extension of the earned income tax credit to all low-income wage earners to mitigate the effects of the payroll tax on those least able to pay it. She proposes a consolidation of the OASI and DI trust funds to increase flexibility in meeting short-run financing problems. She argues for an increase in the retirement age to 68 or for declining wage replacement rates to deal with the deficit projected for the social security funds over the long run.

b. Robert Ball's book

Robert Ball, a former Social Security Commissioner and now a senior scholar at the Institute of Medicine, put forth his views on the future of social security in a 1978 volume entitled "Social Security Today and Tomorrow" (Columbia University Press, New York). The principal features of Ball's future design for social security are as follows:

—Ball posits the policy goal for retirement income as provision of a level of living comparable to that achieved while working; he regards a wage-replacement rate of 65–80 percent as adequate for

most aged people in good health who live independently. He would arrive at this goal by reliance on a universal social security system for regular workers at below-average wages, with supplementary pensions carrying part of the load for above-average wage earners, and individual savings meeting part of the earnings replacement needed by the top 10–15 percent. An improved SSI program would eradicate poverty among the aged. He would constrain Federal support to be at least sufficient to eliminate poverty but no greater than the preretirement level of living.

—Ball urges improvements in private pensions, particularly with regard to cost-of-living adjustments, vesting rules, and survivors' benefits. He would constrain the sum of social security and private pension benefits to be no more than 80 percent of preretirement earnings, however.

—Ball favors universal coverage by social security, with government employee pension plans modified as needed. He would target any future benefit increases on correcting the grossest inequities and inadequacies of the system rather than on across-the-board increases for everyone. In particular, he favors higher benefits for single workers and widows. He would also establish higher benefit rates for the very old (e.g., those 85 and over).

—Ball would apply to beneficiaries under age 65 the more liberal exemption from the retirement test that now applies between ages 65 and 70. He favors accounting for earnings under the retirement test on a monthly rather than an annual basis as was the case prior to 1978.

—Ball favors retention of the "retirement insurance" focus of social security, rather than converting it into a funded annuity; he favors a gradual introduction of general revenues to help fund the system in concert with the payroll tax.

—The remaining sex-related differences in social security law are recommended for elimination.

—With a system of adequate retirement income, Ball feels that special tax breaks (such as the extra old age income tax exemption) and price subsidies based on age should be eliminated. He proposes that half of social security benefits be subject to income taxation.

—Ball argues for retention of the progressive benefit formula and dependents' benefits. He would reduce the regressive impact of the payroll tax by extending the earned income tax credit to all low-income wage earners and, in the long run, by greater reliance on the income tax as a funding source.

—Ball urges the Social Security Administration to make a greater effort to inform participants of their protection under the system.

3. HEW SOCIAL SECURITY UNIVERSAL COVERAGE STUDY GROUP

The 1977 Social Security Amendments required the Department of Health, Education, and Welfare to study and report to Congress on options for extensions of social security coverage to all qualified jobs. (Most uncovered jobs are in Federal agencies, State and local governments that have opted to remain outside the system, and jobs with nonprofit organizations that have chosen to stay uncovered.) The study group's report, issued on March 25, 1980, made no specific

recommendations but instead analyzed various options to improve coordination of social security coverage and other pensions for workers not now under social security. These options are described below under four major categories of possible actions:

—Mandate social security coverage for some or all workers in non-covered employment.
—Increase incentives for voluntary coverage.
—Reduce coverage gaps and undesirable subsidies.
—Maintain the status quo.

a. Mandate coverage

Social security coverage would significantly improve the protection provided to public employees and their dependents against income losses caused by disability or death. It would also guarantee that at least some percentage of anticipated retirement income would be fully portable from job to job throughout a career. In addition, many State and local government employees would benefit from higher adjustment of their pensions to compensate for cost-of-living increases when they are no longer working. Against these advantages, many employees express concern that the relatively generous retirement income from their public retirement systems would be threatened by any proposed coordination with social security coverage.

Mandating social security coverage for all employment would resolve the problems of windfall benefits and gaps in coverage most effectively. Initially, however, mandatory coverage on an incremental basis might be preferred.

If social security coverage were mandated for Federal, State, and local government employment, the current retirement benefit formulas would need revision. Extension of social security coverage would mean dual retirement income; one part of total benefits would come from the social security system and another from staff benefit systems.

A staff benefit formula could be coordinated with social security in three ways. Each method would have different effects on the distribution of total benefits among employees with different career patterns. The three approaches are commonly referred to as the "add-on," "offset," and "step-rate" methods.

The *add-on approach* would require no direct interaction between the staff and social security benefit formulas. The staff benefit would be calculated as a percentage of a defined salary base, as in civil service retirement and in many State and local plans, the applicable percentage being determined by an employee's total years of service in the system. This staff benefit would supplement an employee's social security benefit, but the amount of the staff benefit would not be affected by the amount of social security benefits for which the employee would be eligible.

Under the *offset approach* the two benefit formulas would be structurally connected. The staff benefit would be reduced for individual employees to offset partially the varying rates of income replacement provided by the social security benefit formula. For example, the offset percentage could be set at 1.25 percent of an employee's social security benefit times years of participation in the staff plan. The basic staff benefit for an employee with 20 years of service would be reduced by 25 percent of the social security benefit; the staff benefit for an em-

ployee with 40 years of service would be reduced by 50 percent of the social security benefit. The offset is designed to reduce the income redistributional effects of the social security system, which provides relatively higher rates of income replacement for retirees with relatively in low average career earnings.

The same purpose underlies the *step-rate approach*. Instead of reducing the staff benefit by some percentage of the social security benefit, the step-rate formula the benefit percentage applied to the defined salary base would depend on the salary level; higher salaries would receive higher proportional replacement than would lower salaries. For example, the percentage rates might be set at 1 percent and 1.5 percent for the amounts of the salary base below and above $10,000. A retiree would receive a staff benefit equal to 1 percent times years of service, times salary up to $10,000, plus 1.5 percent, times years of service, times all salary above $10,000. Two employees with 40 years of service would receive different income replacement rates in the staff benefit if their salary bases differed.

The transition method chosen to implement mandatory coverage would affect pension benefits for all or some of the existing work force not now covered by social security, establish those employees who would be covered immediately and those who would continue to be exempted, and establish the period in which a transition from the existing structure of pension coverage to the new coordinated system could be accomplished. An existing pension system could be closed and a new one, coordinated with social security coverage, could be substituted in a way that protects benefit eligibility acquired on the basis of past service. The closed system could continue to provide coverage for all or some of the existing work force. Providing social security coverage for the prospective service of employees not previously covered would not necessarily jeopardize any previously earned benefits. Both the closed and new systems would continue to operate through the same fund. A pension system could implement *hold-harmless provisions* that would protect current employees' present benefit accrual rates under the new, coordinated pension plan. A plan could be developed under which the only reduction in benefits for current workers would be the elimination of existing windfalls.

There are two extreme strategies for transition to social security coverage. One strategy would involve everyone immediately. The other extreme would cover only new employees, allowing current employees to move through their careers under the present system. Transition time could be as long as 40 years. Between these extremes are a variety of options. These options would be based on such criteria as age, length of service, years until retirement, or some combination of these. Several transition strategies are as follows:

—Providing full, retrospective coverage for all previously uncovered service to all employees not currently eligible to retire.

—Providing prospective coverage for all future service to all employees not yet eligible to retire.

—Exempting some current employees and providing prospective coverage for future service for all other workers.

—Exempting all current employees and providing coverage for all new employees.

—Providing coverage for all new employees and allowing any current employees wishing to choose social security coverage to do so.

b. Increase incentives for voluntary coverage

Another option is to establish more widespread coverage through voluntary participation. Pragmatically, this option is relevant only to State and local governments and to private, nonprofit organizations. If Congress approved coverage for Federal employees, directly implementing coverage would be more sensible than encouraging voluntary participation.

Voluntary coverage could be encouraged if social security revenues were raised by means other than, or in addition to, the payroll tax. General revenues, a value-added tax, and revenues from a "windfall profits tax" on oil companies have been suggested as potential sources of funds for the social security program. Because the burden of these other taxes would fall equally on covered and noncovered workers, incentives for voluntary participation would increase. Making revenue-sharing funds contingent on voluntary social security coverage would be another possible incentive approach. Another approach would tie Federal grants-in-aid to social security coverage by requiring all employment subsidized by the grants to be covered.

c. Reduce gaps and undesirable subsidies

A third option constitutes an entirely different approach. It would seek to reduce the problems of incomplete social security coverage without requiring such coverage. Insurance gaps, windfalls, or both could be reduced without full coverage in several ways:

—A system for transfer of retirement credits could be established between social security and noncovered retirement systems. This action would help reduce coverage gaps for most individuals who leave noncovered employment.

—A minimum level of protection could be required by imposing mandatory minimum standards on noncovered retirement systems. This action would at least partially eliminate coverage gaps.

—The social security benefits of individuals with periods of noncovered employment could be adjusted to remove or reduce windfall benefits.

—The option to withdraw from social security currently available to State and local government employees could be eliminated. Although this action would not reduce the current gap or windfall problem, it would help prevent it from worsening.

d. Maintain the status quo

The final option is to do nothing, to maintain the status quo. The study group found no support for continuing the status quo in regard to windfalls, and no organization claimed that its members had a right to gain future windfalls. If there were no transitional costs associated with achieving an equitable distribution, maintaining the status quo would not be considered.

4. HEW TASK FORCE ON WOMEN AND SOCIAL SECURITY

In the 1977 Social Security Amendments, Congress required HEW, in consultation with the Justice Department, to report on: Proposals

to eliminate sex discrimination in social security rules; and proposals to eliminate dependency as a factor in entitlement to spouse benefits. That report presented two major options—an earnings-sharing plan, and a double-decker plan. These options and other ideas described in the task force report (U.S. Department of Health, Education, and Welfare, February 1979) are outlined below.

a. Earnings sharing

The basic idea underlying earnings sharing is that each spouse should have social security protection in his/her own right since each spouse is an equal partner in the marriage and each makes an economic contribution to the family. Since both spouses would have their own primary benefits, there would be no aged spouse's and surviving spouse's benefits as under present law.

Under earnings sharing, a person's social security protection would be based on his/her earnings when unmarried and, when married, on half of the total earnings credits of the married couple. A couple's annual earnings would be divided equally between them for the years they were married for purposes of computing retirement benefits; the earnings would be divided when the couple divorced or when one spouse reached age 62.

The 50–50 split of earnings would not apply under certain conditions. The basic earnings-sharing idea was modified in order to pay benefits that are somewhat comparable to present law benefits. The modifications are:

—When one spouse dies, the survivor would be credited with 80 percent of the total annual earnings of the couple during the marriage but not less than 100 percent of the earnings of the higher earner.

—For purposes of benefits for young survivors—a young surviving spouse caring for a child, and children—earnings would not be transferred between the spouses with regard to a marriage in effect at the time of death. Benefits for young survivors would be based on any earnings credits the deceased person had from paid work (while unmarried or during a current marriage), plus any credits acquired as a result of a prior marriage terminated by death or divorce.

—For purposes of disability benefits, earnings would not be shared with regard to a marriage still in effect at the time of disability. Disability benefits would be based on any earnings credits the disabled person had from paid work (while unmarried or during the current marriage), plus any credits acquired as a result of a prior marriage that had been terminated by death or divorce.

An alternative to earnings sharing in the case of couples who are married at retirement (and the survivors of such couples) was also developed. This alternative is known as AIME averaging. Rather than splitting earnings 50–50 at retirement for intact married couples, the spouses' average indexed monthly earnings (AIME) would be averaged for purposes of computing benefits for the couple. A retirement benefit would be computed for each spouse based on the averaged AIME, and then the two benefits would be apportioned between the two spouses based on their proportionate benefits under present law.

Under the plan for apportioning benefits between the spouses, a lifelong homemaker would get a third of the couple's total benefit and the earner would get two-thirds as under present law. Survivors of all retired couples would get two-thirds of the couple's benefit as do survivors of one-earner couples under present law.

Total benefits to lifelong married couples would be similar under earnings sharing and AIME averaging, but otherwise the two approaches are different. Earnings sharing is a more broad-scale approach that would deal more fully with the basic issues. AIME averaging is more limited and represents less of a departure from present law. It deals primarily with providing equal retirement benefits for couples with the same average earnings.

b. Double-decker benefit structure

Double-decker systems are not specifically designed to deal with issues related to the treatment of women under social security. However such systems would provide social security protection for each spouse in his/her own right. Under the double-decker plan described below, each U.S. resident would have retirement, survivors, and disability protection. This universal protection would be the first tier of a two-tier system. Tier I would be a flat-dollar payment of $122 for U.S. residents at age 65 (or upon disability). The second tier (tier II) would be a benefit equal to 30 percent of a person's AIME in covered employment. Reduced benefits under both tiers would be available as early as age 62. The benefit for an aged or disabled worker would be equal to the sum of a tier I and a tier II benefit. The combination of flat-dollar and flat-percentage payments under this option would approximate benefit levels under present law. Under the double-decker option, the adequacy and equity elements of social security would be separated—tier I would provide the social adequacy element, and tier II the equity element.

Several features of this option are not an integral part of a basic double-decker system but were included to improve the protection of specific groups. Two such features are the 50–50 split of earnings at divorce and the inheritance of earnings by a surviving spouse for purposes of computing tier II benefits. If unpaid divorced or surviving spouses received only tier I benefits, their protection would be substantially lower than present law. These two features of the plan are the same as those under earnings sharing, although the benefit amounts would be somewhat different due to the different benefit structure. These features are included primarily to deal with issues of protection for homemakers.

c. Protection for homemakers in their own right

The earnings-sharing and double-decker options would replace dependent spouse's benefits with protection for homemakers in their own right. The option discussed below also would provide individual protection for homemakers, but without making changes in the system as comprehensive as those required by the earnings-sharing and double-decker options.

Under this option, homemakers would receive social security earnings credits based on an imputed dollar value for their unpaid services in the home. Homemaker credits would replace the current

system of dependent spouse's benefits because a homemaker would acquire her own earnings credits, thereby becoming entitled to a benefit in her own right.

This approach would eliminate the problem of duplicative protection for women who are homemakers for part of their lives and paid workers for part of their lives. It would also serve to fill any gaps in their social security protection resulting from leaving the paid labor force to perform unpaid homemaker or childcare services. Protection for divorced and disabled homemakers would be increased because homemaker credits could enable their survivors to get benefits and would help them meet the "recency of work" test for disability benefits.

This option would require setting a specific dollar value for work performed in the home. To be equitable among homemakers, the value would have to be adjusted based on the time and effort each homemaker spends performing homemaking services. Adjustments might also have to be made for those who work in part-time or full-time paid jobs in addition to performing unpaid homemaker services. However, from an administrative standpoint, adjustments on an individual basis would not be feasible; it would seem necessary to provide a uniform credit for all homemakers (or perhaps two or three alternative amounts).

There are at least three alternatives for financing homemaker credits:

—Require homemakers to pay social security taxes on the imputed value of their services. In order to finance the credits on the same basis as credits for unpaid wages, contributions would have to be made at the combined employer-employee rate (12.26 percent of covered earnings for 1980).

—The additional costs for the homemaker credits could be funded by general revenues. Under this alternative, homemakers would receive credits based on the value of imputed wages but would pay no social security taxes.

—The additional benefits could be covered by increases in social security taxes of paid workers.

d. Greater equity between one- and two-earner couples

Five options would reduce or eliminate the difference in benefits for one- and two-earner couples by modifying or eliminating payment of dependent spouse's benefits. In general, these five options would either increase the benefits payable to two-earner couples or decrease the benefits payable to one-earner couples.

Option 1.—Pay all or part of the spouse's benefits in addition to the benefit based on the spouse's own earnings. This option would override the dual entitlement provision since the spouse with the lower average earnings would get the larger of the worker's or the spouse's benefit plus some percentage of the smaller benefit. This option would improve treatment of two-earner couples by raising their benefits, while benefits or one-earner couples and single workers would remain the same.

Option 2.—Eliminate spouse's and surviving spouse's benefits. This option would treat all individuals with the same average indexed monthly earnings (AIME)—married or single—alike. However, it

would not necessarily provide equal benefits for couples with the same total AIME. Because of the weighted benefit formula, the total benefits for a couple would depend on the proportion of the total AIME earned by each. In general, the greater the proportion of the AIME earned by one spouse, the lower the benefit for the couple since less of the couple's total AIME would fall in the more heavily weighted portions of the benefit formula. Under this option, the benefits paid to one-earner couples would be reduced by one-third; there would be no, or lower, reductions in benefits for two-earner couples. The greatest impact of this option would be on surviving spouses and on divorced or separated spouses who are not insured for social security benefits on the basis of their own work. Since this option would leave widows and divorced women with no protection as dependents or survivors, it would be practical only in conjunction with other provisions.

Option 3.—Reduce the amount of the spouse's benefit from 50 percent to 33⅓ percent of the worker's primary insurance amount (PIA) and increase the PIA's of all workers by 12½ percent. The benefits of two-earner couples and single persons would be raised 12½ percent, while benefits of one-earner couples would not change; thus, the difference in benefits for one- and two-earner couples and for married and single workers would be narrowed. Increasing the workers' benefit by 12½ percent would also increase benefits for widows and widowers by the same percentage; thus protection would be improved for all surviving spouses regardless of whether the survivor was the primary earner or the low paid (or unpaid) spouse. On the other hand, lowering the amount of the spouse's benefit from 50 to 33⅓ percent of PIA would cause financial hardship for separated and divorced homemakers who were not insured for benefits in their own right.

Option 4.—Cap the spouse's benefit by providing a maximum dollar benefit amount, regardless of the level of earnings of the worker. Placing a cap on the benefit amounts payable to spouses could eventually narrow the differential benefits paid to a significant number of one- and two-earner couples and the differential between married couples and single workers. However, a low cap could cause considerable hardship for divorced and separated women and one-earner couples. Placing a cap on the spouse's benefit would eventually lead to a flat-rate spouse's benefit unless the cap were increased periodically. If the cap were not increased, eventually all spouse's benefits would be the same regardless of the earnings of the worker.

Options 5.—Base benefits for a retired couple on combined family earnings. Benefits for retired couples would be based on the couple's total earnings as a unit. The benefit for each spouse would be equal to 75 percent of the benefit based on the combined earnings of the couple (a total of 150 percent for the couple). This would equalize benefits for one- and two-earner couples. On the other hand, the option would raise new issues of fairness between married and single workers.

e. Reduction in the number of years used to figures AIME

The next two options would reduce the number of years of earnings that are used to compute the worker's AIME and PIA. These options are designed to help women who spend only part of their lives in paid

employment, but they would not help women who do not work in covered employment.

Option 1.—Provide for a shorter averaging period. Benefits could be based on earnings averaged over 10 or 20 years rather than over a working lifetime. Under this option, time spent out of paid employment would have less effect on benefit amounts of women workers. However, the use of a shorter averaging period would raise a question of fair treatment of workers with many years of covered work.

Option 2.—Provide dropout years for childcare. Instead of reducing the averaging period, years that parents spend out of the paid labor force in childcare activities could be excluded from the averaging period.

Ten additional dropout years would reduce the ultimate averaging period from 35 to 25 years—a reduction of 29 percent. The additional dropout years would significantly increase a homemaker's AIME and PIA. This option would increase the benefits paid to people who work some years and stay home for the purpose of caring for preschool-age children other years. It would not increase benefits for childless women who performed unpaid homemaker services for part of their lives or for homemakers—with or without children—who never worked in covered jobs.

f. Additional protection for divorced persons

The following two options are directed specifically toward improving protection for divorced persons.

Option 1.—Reduce the 10-year duration-of-marriage requirement for divorced spouses. The Social Security Amendments of 1977 reduced the duration-of-marriage requirement for entitlement to divorced spouse's and surviving divorced spouse's benefits from 20 years to 10 years beginning January 1979. A further reduction would enable additional divorced homemakers to get social security dependents' benefits without increasing costs substantially, since most divorced women have protection either because of their own earnings or as a dependent in a subsequent marriage. However, the possibility increases that two, three, or more people could qualify for divorced spouse's benefits based on one worker's earnings.

Option 2.—Divide a couple's total annual earnings for each year of marriage 50–50 upon divorce. While this option is included as a feature of the earnings sharing option, it could be implemented separately under the present benefit structure. It would address the issue of providing protection for persons in their own right, rather than as dependents, by allowing individuals who had never worked to pay to obtain earnings credits upon divorce which could be used as a basis for future benefits. Dividing earnings equally between the spouses at divorce could be viewed as giving recognition to the economic value of homemaker services. Under present law, the entire cost of providing benefits for divorced spouses is borne by all workers. Under this option, a larger portion of that cost would be borne by the former spouse.

g. Additional protection for aged surviving spouses

This section discusses four options designed specifically to improve protection for aged surviving spouses. The first two options would accomplish this objective by increasing dependency-based protection, thus increasing the protection married workers have compared to single workers. The third option would base benefits for the surviving

spouse on total benefits of the couple, thus improving protection of survivors of many two-earner couples, regardless of whether the survivor is the primary or secondary earner. The fourth option would eliminate dependent's benefits for surviving spouses and provide or increase protection for the survivor of a married couple in his or her own right.

Option 1.—Provide a benefit increase for very aged beneficiaries. A special benefit increase could be provided for beneficiaries when they reach age 80 to 85. This option would take account of the fact that benefit amounts are adjusted only for increases in the Consumer Price Index and do not take account of increases in the general standard of living. This option would benefit many more women than men.

Option 2.—Provide full benefits for survivors. Unreduced benefits could be paid to surviving spouses at age 60 or 62, rather than age 65. While surviving spouses can get benefits equal to 100 percent of the deceased spouse's PIA at age 65, the benefit amount is substantially reduced if they take benefits before that age; it is 71.5 percent of the worker's PIA at age 60 and 82.9 percent at age 62. In addition, the benefit is also limited to the amount the worker would get if he were still alive.

Option 3.—Base benefits for the surviving spouse on total benefits of the married couple. The benefit for a surviving spouse could be set at two-thirds of the total benefits of the couple. Under present law, the surviving spouse of a one-earner couple (and of a two-earner couple where a spouse's benefit is payable) receives a benefit equal to two-thirds of the couple's combined benefit. However, the survivor of a two-earner couple may get as little as 50 percent of the couple's prior benefits where both spouses had the same earnings.

Option 4.—Permit the surviving spouse to inherit the earnings credits of the deceased spouse. This option would permit the surviving spouse to add to his/her social security earnings credits the annual earnings of the deceased spouse for each year of the marriage up to the amount of the contribution and benefit base for each year. Alternatively, the surviving spouse could inherit the deceased spouse's earnings credits and add them to his/her own record up to 70 or 80 percent of the couple's total earnings.

h. Additional protection for surviving spouses under age 60

This section describes two options that are aimed specifically at improving the protection of survivors under age 60. These options would accomplish this objective by providing additional dependents' benefits, rather than by providing protection for widowed homemakers in their own right. As a result, these options would increase the protection of married workers compared to single workers.

Option 1.—Pay widow's benefits before age 60. Reducing the age of eligibility for surviving spouses below age 60 would provide benefits for surviving spouses who cannot get benefits under present law because they are not disabled or caring for children, but who may nevertheless find it difficult or impossible to find a job because of lack of skills, age, ill health, or other factors.

Option 2.—Provide adjustment benefits. Monthly benefits would be payable to a surviving spouse under age 60 for a year after the death of the spouse, subject to the earnings test. The adjustment benefit for

a period following the death of the spouse would provide some protection for surviving spouses under age 60 who do not qualify for benefits under present law.

i. Proposals to eliminate gender-based distinctions

Following is a discussion of the 1977 Carter administration proposals for eliminating gender-based distinctions:

(1) Provide benefits for aged divorced men on the same basis as these benefits are provided for women. This proposal would provide benefits for relatively few men since their own workers' benefits would generally be higher than the spouses' benefits based on their wives' earnings.

(2) Provide benefits for a father who has in his care an entitled child under age 18 or disabled before age 22 on the same basis as benefits are provided for mothers. In most cases, the fathers that would become entitled to benefits under the proposal would have their benefits withheld under the earnings test.

(3) Provide benefits for a widower who had remarried before age 60 but who is not married at the time he applies for aged or disabled widower's benefits. Prior to the 1965 Social Security Amendments, a widow who remarried before age 60 could not receive benefits based on her deceased husband's earnings, but Congress provided benefits based on the first marriage to younger widows if the woman was not married at the time she applied for benefits. Relatively few women were affected and the additional cost was low. Providing similar benefits for widowers would affect even fewer men since almost all are insured on the basis of their own work.

(4) Provide benefits for husbands and widowers of women who qualify for benefits under the transitional insured status provision. The benefit payable under this provision is a flat amount—now $83.70 a month for a worker or a widow and $41.90 for a wife. Because the transitional insured status provision applies only to men reaching age 72 before 1966 and women reaching age 72 before 1969, the number of people getting benefits under this provision has declined from about 130,000 beneficiaries in December 1966 to about 22,700 beneficiaries in December 1977, and eventually the provision will wash out. Few men would become entitled under the administration proposal.

(5) When both members of a married couple are getting special age-72 payments, divide the total amount equally between the husband and wife. When both members of a couple qualify for the payments, $83.70 is paid to the husband and $41.90 is paid to the wife. There is no rationale for dividing the payments to the couple in this way, since neither qualify for the special payments as a "worker" and the wife is not considered to be entitled on the basis of her husband's earnings. Under this proposal, each spouse in a married couple would receive $62.80; total benefits to the couple would be the same as under present law. The proposal would increase benefits for about 1,500 wives and decrease benefits for about 1,500 husbands. These changes in benefit amounts would be significant mainly in cases where the couple is separated.

(6) Terminate the dependent's or survivor's benefits of a man married to a disabled worker beneficiary if his wife ceased to be disabled. Under the proposal, certain men who are dependent or survivor

beneficiaries would have their benefits terminated; under present law, they would continue to receive benefits.

(7) Provide that an illegitimate child's status will be determined with respect to the mother in the same way as it is now determined with respect to the father. Permit a woman's illegitimate child who cannot inherit from her under applicable State law to be deemed her child for social security benefit purposes if: (1) She had been decreed by a court to be the mother of the child; or (2) if she is shown by evidence satisfactory to the Secretary to be the mother of the child and was living with or contributing to the support of the child. The proposed change in the law would eliminate an explicit gender-based distinction but would have virtually no practical effect. There are virtually no cases in which a woman's illegitimate child is not deemed to be her child for social security purposes.

(8) Permit a widower to waive payment of a Federal benefit based on pre-1957 military service so that the military service could be credited for social security purposes. Permit a widower (like a widow) to waive payment of a civil service retirement benefit based in whole or in part on credit for military service performed before 1957 in order to have the military service credited toward eligibility for, or the amount, of, the social security benefit.

(9) Credit the self-employment income of a married couple in a community property State to the spouse who exercises the greater amount of management and control over the trade or business. Where the husband and wife exercise the same amount of management and control, the self-employment income would be equally divided between them. Under present law, when there is no partnership, self-employment income in community property States is credited to the wife only if she exercises substantially all the management and control of the business.

j. Modifications of the offset provision

The 1977 provision to offset public pension benefits against social security spouse benefits to avoid "windfalls" resulting from employment ouside the social security system has received widespread criticism. Following are options to revise that provision:

Option 1.—Reduce the amount of the offset. Since public pensions based on noncovered governmental employment frequently combine the functions of the social security worker's benefit and those of a supplementary private pension, consideration could be given to applying the offset only to that portion of the public pension that is analogous to the social security worker's benefit. The amount of the noncovered pension that would be disregarded could be a flat dollar amount or a percentage of the person's public pension.

Option 2.—Extend the offset provision to pensions based on noncovered employment for nonprofit organizations. This option would provide similar treatment for all persons in noncovered employment, but would make the administration of the offset more difficult since information about many other pension plans would have to be verified.

Option 3.—Eliminate the 5-year exception clause. The difference in treatment of men and women under the exception clause would be eliminated by this modification.

Option 4.—Delay the effective date of the offset provision 5 years. The offset would apply with respect to benefits first payable for December 1982, which would eliminate the implicit gender-based distinction created by the exception clause.

k. Alternatives to the offset provision

These three alternatives would not change the present system of providing dependents' benefits. Options that would eliminate dependents' benefits for spouses also are potential alternatives to the offset provision:

Option 1.—Provide a dependency test. A dependency test would limit the payment of benefits to those spouses and surviving spouses who were dependent on the worker at the time the worker became entitled to retirement or disability benefits or died.

Option 2.—Mandatory universal coverage. Social security coverage could be provided for all Federal, State, and local governmental employees and employees of nonprofit organizations on a mandatory basis.

Option 3.—Eliminate the offset and provide additional financing. This approach would restore the advantage that public employees in noncovered work had over covered workers prior to the offset.

5. MOST COMPREHENSIVE BILLS INTRODUCED IN 96TH CONGRESS

Most of the social security bills introduced in the 96th Congress thus far deal with single issues, such as whether or not to liberalize further the retirement test. However, several bills deal with social security issues more broadly. Three are discussed below—H.R. 14, introduced by Representative Conable (R-N.Y.); identical bills (H.R. 1851, H.R. 2650) introduced by Representatives Frenzel (R-Minn.) and Green (R-N.Y.); and three related bills (H.R. 764, H.R. 765, and H.R. 3588) authored by Representative Stokes (D-Ohio).

a. Conable bill

This bill addresses three major social security issues: financing, treatment of working women, and coverage of government workers. With respect to financing, the ad hoc increases in the wage base enacted in 1977 would be repealed, leaving the wage base ceiling to rise annually with average wages. The payroll tax rate dedicated to fund cash benefits would be increased, but the tax rate applied to medicare funding would be reduced. The shortfall in medicare funding would be covered by general revenue payments to the hospital insurance trust fund.

With respect to the other two issues, the Conable bill would mandate social security coverage for federal employees, and a "working spouse" benefit would be established to insure a greater return from social security on the earnings of married women. The "working spouse" benefit would be a percentage of the smaller of a retirement benefit or a derivative benefit (spouse, widow[er]) for persons dually entitled and would be incremental to the regular entitlement. Only one member of a married couple would be eligible for this benefit.

b. Frenzel/Green bills

These bills include several provisions in common with the Conable bill—viz, a repeal of the ad hoc wage base increases; mandated coverage of Federal employees; and establishment of a "working spouse" benefit along the lines of the Conable proposal. However, these bills include several other features not found in Conable:

—The normal retirement age would be increased gradually from 65 to 68 between 1999 and 2011.

—All gender-related differences in the social security statute would be ended, and marriage/remarriage of a beneficiary would no longer be used as a factor in termination or reduction of benefits.

—The retirement test would be phased out by 1982.

These two bills would increase the payroll tax rate to make up for the lower wage base, and the individual trust funds would be permitted to borrow from each other if needed. Unlike the Conable bill, there is no provision for greater use of general revenue funds.

c. Stokes bills

These bills have two provisions in common with the Frenzel/Green bills—extension of coverage to Federal employees, and elimination of the retirement test (the latter being done immediately rather than gradually).

However, the Stokes bills call for a number of program liberalizations not included in the other bills:

—Full retirement benefits would be paid as early as age 55 to population subgroups for whom earlier retirement than the national norm can be justified on actuarial grounds due to shorter life expectancies.

—Primary insurance amounts would be increased.

—The marriage duration requirement for divorced spouses to receive derivative benefits would be reduced to 5 years.

—Workers earning less than $4,000 yearly would be exempt from the payroll tax.

The increased social security costs and reduced revenues that would result would be made up by: Subjecting all wages to the payroll tax (except those exempted as mentioned above); and introducing more general revenues into the program.

Stokes also proposes two major liberalizations in the SSI program: Raising Federal benefit rates to the poverty income level; and lowering age eligibility for SSI benefits from 65 to 60.

B. Public Employee Retirement Systems

1. HOUSE PENSION TASK FORCE

In 1978, a Pension Task Force of the Committee on Education and Labor, U.S. House of Representatives, filed a report summarizing the findings of an in-depth review of the status of public employee retirement systems, including Federal, State and local systems. While primarily an exposition of facts on these systems, the report ("Pension Task Force Report on Public Employee Retirement Systems," 95th Congress, 2d Session, March 15, 1978) draws several conclusions that

suggest areas where new policy initiatives are needed. These conclusions are summarized below:

—The impacts of these systems on the national economy, financial markets, governmental spending, and the well-being of workers and their families have not been fully comprehended by those involved, and ". . . the current regulatory framework does not adequately protect the vital national interests which are involved."

—Current Federal legal provisions regarding these systems do not lead to a unified national policy, and the primary body of law (the Internal Revenue Code) is ambiguous in its applicability as a regulatory device for these systems.

—Regarding State legal provisions, the report states that "the absence of a coherent and uniform regulatory framework has resulted in generally ineffective communication of basic plan provisions, inadequate safeguarding of plan assets and insufficient protection of participants' interests."

—In many systems, participants are poorly informed of plan provisions and vested benefit amounts, there is a lack of independent and external review of plan financial operations, and there is an incomplete assessment of true pension costs.

—A majority of public employee retirement plans fail to meet the minimum standards for vesting set for private plans by ERISA.

—Pointing out that 17 percent of public plans still rely on pay-as-you-go financing, the report calls for elimination of incentives for continued use of such financing and accumulation of pension fund reserves on an actuarially sound basis instead. Uniform actuarial measures, terminology, and standards are advocated.

—A uniform standard for fiduciary conduct by plan managers is urged to avoid impairment of plans' earnings through investment patterns dictated by political rather than financial considerations.

Legislation following up on the report recommendations and observations is expected from the task force leadership, but no bill has been introduced at this writing.

2. PRESIDENT'S COMMISSION ON MILITARY COMPENSATION

Also in 1978, a commission established by President Carter to review military compensation reported its recommendations. While much of the "Report of the President's Commission on Military Compensation" (April 1978) deals with active duty pay and other matters not directly relevant to this paper, extensive work was devoted to a proposal to reform the military retirement system. The commission's proposal is described briefly below:

—The basic philosophy underlying the proposal is that military retirement should be viewed as a supplement to social security to provide an adequate income in old age rather than as simply deferred pay, but the system should be designed as an incentive for career service and should be accompanied by a program of assistance in transitioning to civilian employment.

—Old age annuities would be based on the high-3-year-average pay to retirees at age 62 with at least 10 years' service, or at age 60 with at least 20 years, or at age 55 with at least 30 years.

—Wage replacement rates would range from 21¼ percent (10 years' service) up to 90 percent (35 years).
—Upon entitlement to receive social security benefits, military retirement benefits would be reduced by 1¼ percent of the social security primary insurance amount for each year of service up to a maximum reduction of 50 percent.
—Both benefit payments and the wage base to be used for future retirees' benefit computations would be adjusted by CPI increases.
—A deferred compensation trust fund would be established for active duty personnel that they can draw on for aid when transitioning to civilian life.
—Limit medical benefits to retirees with at least 15 years' service, with entitlement at the time annuity payments begin for those with less than 25 years' service but entitlement upon separation for those with longer tenures.
—A military retiree who works in the Federal civil service should not receive retired pay while in Federal employment, and retirement credits earned in the civil service should be coordinated with the military retirement system.
—Current retirement rules should continue for active duty personnel with 4 or more years of service, for personnel serving second enlistments, and for those serving beyond their initial periods of obligation.

The commission's plan would deal with the problems of coordinating with social security and the civil service system and would change the early retirement incentives for individuals with vested benefits. The cost analysis done by the commission indicated that budget outlays would rise initially for about 15 years following enactment of the new system. However, over the long run, steady-state retirement costs would decline by about one-third compared to the current program.

II. OUTLINE OF ADDITIONAL POLICY OPTIONS

This section outlines policy options identified from sources other than those reviewed in section I, organized by the policy issue primarily addressed by the option. Following each option's description, a reference to a fuller discussion of the topic is shown in parentheses. Where an option is included as a provision in a bill introduced in the 96th Congress, a reference is made to the first House and/or Senate bill number including that provision. The many duplicative bills associated with certain provisions are not listed.

A. Benefit Adequacy and Fairness

1. OPTIONS TO INCREASE CURRENT INCOME OF THE AGED

a. Income tax credits, deductions, exemptions and exclusions

Presently, each taxpayer age 65 and over receives an extra personal exemption. This extra exemption could be offered to a broader segment of older people by reducing the eligible age to 60, or 55 for widows and widowers (H.R. 984).

Excluding certain types of income from taxation would help older taxpayers. Suggestions include exclusions of various amounts of pen-

sion benefits (H.R. 109, 25 other bills), and of interest income for taxpayers over a certain age (H.R. 541, S. 1040, one other bill).

Itemized deductions for certain expenses of the aged have been proposed, such as deductions for the costs of electrical usage (H.R. 1721).

New tax credits have been proposed to assist the aged, including credits for partial relief from property taxes or rent (H.R. 499, six other bills), energy costs (H.R. 1097, two other bills), and home maintenance expenses (H.R. 4744).

Existing tax credits that benefit the aged and retired may be liberalized, such as the tax credit for the elderly (H.R. 105, S. 94, and 13 other bills).

Federal reimbursement to States offering property tax relief to the aged would spur such assistance at the State level (H.R. 2632).

b. SSI

Increase Federal benefit levels to the amounts equivalent to the poverty line for singles and couples (H.R. 764).

Federalize benefit costs, resulting in higher total benefits if States used freed funds to increase payment levels (H.R. 1538).

Reduce income counted against SSI benefit by excluding interest income (H.R. 2403), or by excluding the value of shelter provided to recipients (S. 620), or the value of other support in kind (H.R. 1727).

Provide supplementary housing allowances for SSI recipients (H.R. 487).

Lower the age limit for eligibility from 65 to 60 (H.R. 764).

Provide SSI recipients with extra cash in lieu of food stamps, thereby raising income level for recipients who don't claim their stamps (H.R 4321, S. 1290).

Increased the number of eligibles by revising the assets limit to exclude the value of a burial plot (H.R. 882, S. 329, two other bills), or to revise the present partial exclusion for the value of a home (H.R. 713).

c. Unemployment benefits

Prevent the prospective loss of income for pensioners claiming unemployment benefits by delaying the effective date (H.R. 1653, H.R. 3920) or repealing outright (H.R. 4464) the law requiring all States to offset retirement benefits against unemployment benefits for dual beneficiaries.

d. Railroad retirement

Eliminate certain offsets against social security benefits for railroad retirement beneficiaries (H.R. 699, four other bills).

e. Federal employee retirement

For military retirees over a certain age, recompute retired pay based on current active duty pay rates rather than the rates applicable at time of retirement (H.R. 462, five other bills).

f. Assistance in kind

Expand health insurance protection for the aged, either as: part of a new national health insurance plan (Robertson; H.R. 16; H.R. 21); protection against catastrophic health care costs (H.R. 3277; S. 760); an expansion of medicare coverage, to cover drugs, for example (H.R. 1360); or improved coverage of hospital and physician services under medicare (H.R. 58).

Expand medicaid coverage by excluding the value of a burial plot from the assets test (H.R. 882).

Establish special housing allowances for certain SSI recipients (H.R. 1135).

Reduce rents for the aged living in section 8 housing (H.R. 1119).

Give the aged preferred treatment in the event that food stamp benefits must be reduced to stay within the appropriations limit (H.R. 4028, S. 982).

Increase food stamp benefits for the aged by allowing them medical expense deductions (H.R. 3050, S. 1060, one other bill), by increasing the program's standard deductions in determining their countable income (H.R. 3545), or by increasing the income deductions for costs of shelter (H.R. 2126, S. 632, nine other bills).

Revise the rules for provision of reduced fare transit to the aged (H.R. 4378, S. 1269, one other bill).

Subsidize energy supplies on behalf of SSI recipients and participants in certain other welfare programs (S. 1270).

2. OPTIONS TO REVISE FUTURE ENTITLEMENTS FOR RETIRED WORKERS

a. Social security

Compute social security benefits based on average earnings for the 3 years of highest earnings (H.R. 586).

Increase early retirement benefit amounts by waiving rule for recent work force attachment to qualify for social security disability benefits after age 62 (H.R. 175).

b. Railroad retirement

Extend railroad retirement benefit eligibility to age 55 for workers with 30 years of service (H.R. 1084, H.R. 2696).

Provide benefits for a spouse of a disabled worker when the spouse reaches age 60 (H.R. 4341).

c. Public employee retirement

Reduce wage replacement rates but retain adjustments for cost of living increases (Munnell and Connolly).

Include years of military service in base period for civil service retirement benefit computation (H.R. 135, H.R. 3007).

Liberalize minimum vesting requirements for Federal employees (Shipp).

Reduce extent of "backloading" in Federal employee retirement benefit formulas in order to offer higher wage replacement rates to shorter term employees relative to career employees than occurs presently (Shipp).

d. Private pensions

Change ERISA regulations to liberalize minimum vesting requirements by: Reducing below 25 the age threshold above which vesting is required (perhaps after 1 year of service); reducing the 10-year-service period now required by ERISA; and requiring allowance of breaks in service for childbearing (Schroeder).

Permit greater portability of credits among plans under ERISA (Schroeder; Shipp).

Prohibit cash withdrawals of employee contributions to plans (Greenough and King).

Set up a pool fund for combined payment of small entitlements from several different plans for workers with multiple private pension plan coverage (Greenough and King).

Require pension plans to liberalize their terms of coverage for a firm's employees (Shipp).

Require more equitable benefits for short-term workers than most plans currently provide (Shipp).

3. OPTIONS TO REVISE MECHANISMS FOR BENEFIT AND EARNINGS CREDIT ADJUSTMENTS ASSOCIATED WITH PRICE OR WAGE INCREASES

a. Social security

Make cost-of-living adjustments in social security benefits semi-annually instead of annually (H.R. 294, four other bills).

Establish a special CPI for the aged for use in social security cost-of-living adjustments (H.R. 330, two other bills; Campbell).

Base the automatic annual social security benefit adjustments on the average wage increase whenever wages rise by less than the CPI (Campbell; Rivlin).

Index social security benefits to wage rather than price increases to keep benefits in line with economic growth, perhaps restricted to persons on the rolls 10 years or more or as a tradeoff for lower initial wage replacement rates (Campbell).

Index wage credits under social security by price rather than wage changes to limit the size of the system (CRS; Campbell).

Different approaches to indexing earnings credits require different ways of adjusting the dollar brackets of the benefit computation formula to assure that the desired degree of progressivity in the benefit formula is retained over time (Campbell).

b. Federal employee retirement

Limit civil service retirement cost-of-living increases to 70 percent of increases in the CPI (CBO).

c. Private pensions

Encourage or require private pension plans to offer at least partial protection of benefits against inflation (Clark; Shipp).

Require that collective bargaining cover pension benefits for workers already retired (S. 1473).

Index the maximum allowable contribution to an IRA for changes n wages or prices (S. 1242).

d. Welfare benefits

Exclude social security cost-of-living increases from countable income in computing SSI benefits (H.R. 588, two other bills), and in determining eligibility for housing assistance (H.R. 743, two other bills).

Exclude social security and SSI cost-of-living increases from countable income in determining eligibility for the medicaid program (H.R. 338, two other bills).

4. OPTIONS TO REVISE THE TREATMENT OF WOMEN UNDER RETIREMENT INCOME SYSTEMS

a. Widows' benefits

Allow receipt of both a widow(er)'s social security benefits and a retired or disabled worker's social security benefits without offset (H.R. 484).

Reduce the offset of social security benefits against military survivors' benefits (Shipp).

Allow payment of VA dependents' indemnity compensation to widows who remarry after age 60 (H.R. 679, two other bills).

Strengthen ERISA requirements for private pension plans to provide joint and survivor benefits (H.R. 717, H.R. 2049; Clark).

Do not reduce a person's social security benefits because of a marriage or remarriage (H.R. 1730).

Lower age requirement for a social security widow(er)'s benefit from 60 to 50 (H.R. 2466, S. 907, four other bills).

Extend military retired pay to certain survivors of reserve personnel (H.R. 2878).

Maintain judicial annuities for survivors who remarry after age 60 (H.R. 2974, H.R. 3594).

Require survivors' benefits under private plans for vested employees who die before retirement age (H.R. 3340).

Revise military survivors' benefits and allow spouse participation in election of benefit options (Shipp).

Allow a 1-year grace period in which to elect the survivors' benefit option under civil service retirement (H.R. 527).

Allow a widow(er)'s benefit under civil service retirement for a spouse who married a pensioner after his/her retirement (H.R. 528).

Extend civil service retirement survivors' benefits to widow(er)s of pensioners who did not elect the survivors' option (H.R. 1680).

Allow a civil service retiree to increase the survivor benefit to protect a spouse of a remarriage (S. 203).

Require under ERISA that survivor option agreements in private plans must be signed by spouses (Schroeder; Shipp).

Allow widows to remarry after a certain age without loss of railroad retirement benefits (Shipp).

Require that survivor option agreements for civil service retirement must be signed by spouses (Shipp).

Provide survivor benefits under civil service retirement without reduction in the retirement benefit (Shipp).

Reduce the age below which the remarriage penalty applies under civil service retirement (Shipp).

Increase survivor benefits under civil service retirement (Shipp).

b. Divorced spouse benefits

Reduce the marriage duration requirement for divorced spouse benefits under social security to less than 10 years (H.R. 874), or eliminate the duration requirement (H.R. 3309).

Do not reduce a person's social security benefit because of a marriage or remarriage (H.R. 1730).

Reinstate a terminated child's benefit under social security if the parent is divorced (H.R. 2464).

Entitle an unmarried divorced spouse who was married longer than some minimum duration to a portion of a civil service retirement or survivor's benefit (H.R. 1867, H.R. 2818).

Revise social security rules to reflect better the changed structure of the family (Robertson; Burkhauser).

Provide medical benefits to spouses divorced from military personnel if marriage lasted 20 years or more (Schroeder).

Make provision under ERISA for splitting of private pension benefits between divorced spouses (Schroeder).

Revise the structure of social security such that covered earnings are shared between spouses for purposes of determining benefit entitlements upon retirement (Burkhauser).

Extend railroad retirement benefits (Shipp), military retired pay (Shipp), and civil service retirement (Schroeder; Shipp) to divorced spouses.

c. Equity in treatment of work by women

Provide earnings credits for unpaid homemaking under social security (H.R. 1039; Shipp; Gordon).

Establish a "working spouse" benefit under social security (H.R. 3158, S. 907, four other bills.)

Reform the structure of social security to reflect greater labor force participation by women, through earnings sharing for example (Robertson; Burkhauser; Shipp; O'Neill; Gordon).

Limit the social security payroll tax paid by two-earner couples to the maximum an individual could pay for 1 year (Feldstein).

Increase social security benefit amounts for two-earner couples (Shipp).

Allow couples to combine their social security earnings records (Shipp).

Base social security benefits on the average of combined covered earnings for couples (H.R. 2503, S.907, three other bills; Shipp).

In conjunction with measures to improve benefits for working women, reduce or eliminate the dependent spouse social security benefits (Shipp).

Eliminate the use of sex-based actuarial tables in calculating private pension benefits (Shipp).

Repeal the provision to offset public pension benefits against social security spouses' benefits (H.R. 398, S. 294, 10 other bills), or extend the period of exemption before the provision's implementation, perhaps waiting for action on universal coverage under social security (H.R. 2507).

Continue paying social security disability benefits to a person who marries a civil service retirement beneficiary (H.R. 658).

Do not reduce a person's social security benefit because of a marriage or remarriage (H.R. 1730).

Modify ERISA rules on vesting to apply before age 25 (perhaps after 1 year or service), to reduce the 10-year service requirement, and to allow breaks in service for childbearing (Schroeder).

Permit portability of wage credits under ERISA (Schroeder), and set up pool for payment of small entitlements from several pension plans (Greenough and King).

Require private plans to pay more equitable benefits to short-tenure workers (Shipp).

Liberalize rules under ERISA on allowable breaks in service (Shipp).

5. OPTIONS TO INCREASE PRIVATE SUPPORT OF THE AGED

Income tax deductions and credits

Allow an income tax deduction or credit for a taxpayer's expenses in supporting a dependent household with an aged member (H.R. 452, nine other bills).

Allow an income tax deduction for medical expenses incurred in paying costs on behalf of aged persons (H.R. 1728).

6. OPTIONS TO IMPROVE RETIREMENT PLANNING

a. Preretirement education

Establish grants to support programs of preretirement education (H.R. 2573, two other bills).

b. Information on retirement benefits

Initiate public information campaign on how social security and private pensions plans work (Robertson; NCSW).

Require the Social Security Administration to inform covered workers annually of covered wages and/or current social security benefit entitlements, and/or projected benefit entitlements (H.R. 3601, S. 908).

B. Benefit Financing

1. SOCIAL SECURITY FINANCING OPTIONS

a. Level of funding

Require contributions to the social security trust funds sufficient to accumulate reserves that would provide funding for all future benefits to which retirees and workers are entitled using standard actuarial assumptions (Feldstein; Campbell).

b. Sources of funding

Transfer general revenues to OASI, DI, and HI (H.R. 33, five other bills; Robertson; Campbell).

Pay for DI benefits or HI benefits from general revenues and adjust the payroll tax to apply only to OASI (H.R. 850, six other bills; Munnell—1979; Rivlin).

Finance the "welfare aspects" of OASI from general revenues but retain the payroll tax for the "retirement aspects" of the program (Munnell—1979).

Authorize trust fund borrowing from general revenues during periods of economic recession (Rivlin).

Levy a new tax (e.g., a value-added tax or a tariff on oil imports) to pay for part or all of OASDHI costs (Robertson).

Combine two or more of the three trust funds (Rivlin), or allow OASI and DI to borrow from each other as needed (H.R. 546).

Increase the ceiling on covered wages (H.R. 33, four other bills), or increase the payroll tax rate but reduce the base (H.R. 546).

Eliminate the employer portion of the payroll tax (Campbell).

c. Cost reductions

Adjust annual credits for covered earnings by a price index rather than a wage index in obtaining an average monthly wage for benefit computation (CRS; Campbell).

Adjust social security benefits by the year's average wage increase rather than by the CPI increase in years when wages fall behind inflation (Campbell; Rivlin).

Allow fewer years than 5 to be disregarded in computing average monthly wage to determine benefits for workers with limited years of coverage (Budget).

Phase out dependent's benefits for students over age 18 (Budget).

Reduce benefit eligibility of nonaged spouses who care for minor children (Budget).

Apply offsets to social security benefits for retirees who also receive Federal employee pension benefits (Budget).

Eliminate the minimum floor under social security benefit amounts for new beneficiaries (Budget).

Limit eligibility for survivors' benefits to families of workers who were fully entitled when deceased (Budget).

Raise the age at which the retirement test ceases to apply from 70 to 72 (Budget).

2. CIVIL SERVICE RETIREMENT FINANCING OPTIONS

a. Level of funding

Increase the Federal employee contribution rate from 7 to 13 percent (CBO).

C. EMPLOYMENT AND RETIREMENT

1. OPTIONS TO LIBERALIZE MANDATORY RETIREMENT AGE LIMITS

a. For the work force generally

Eliminate mandatory retirement for any job covered by the Age Discrimination in Employment Act (H.R. 70, three other bills; NCSW).

b. For the military

Eliminate mandatory retirement for military personnel (H.R. 1686).

Raise the mandatory retirement age in the military to 65 (H.R. 1685).

Permit active military duty for reserve officers until age 60 (S. 470).

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c. For other selected occupations

Eliminate mandatory retirement for Foreign Service personnel (H.R. 2694, H.R. 3730).

Prohibit or revise age restrictions applicable to aircraft pilots (H.R. 3201, six other bills).

Prohibit State or local laws that exempt jobs from coverage under the Age Discrimination in Employment Act (H.R. 4952).

2. OPTIONS TO REVISE FINANCIAL RETIREMENT INCENTIVES

a. Early retirement incentives

Lower the minimum age for social security early retirement from 62 to 60 (H.R. 708).

Liberalize eligibility for social security disability benefits after age 60 and lengthen eligibility period for unemployment benefits after age 60 if social security early retirement options are curtailed (Greenough and King).

Allow military retired pay at age 55 for members of Reserves and National Guard (H.R. 816).

Revise Federal civil service early retirement provisions to approximate those of comparable private pension plans (CBO).

Eliminate social security early retirement benefits (Greenough and King).

Adjust social security early retirement benefits so that the reductions are actuarially neutral rather than an encouragement to early retirement (Feldstein).

Increase the social security benefit amounts paid out at age 62 (Clark).

Increase the reduction in full retirement benefits paid for age 62 retirement under social security from 20 to 24 percent (Wertheimer and Zedlewski).

b. Deferred retirement incentives

Encourage employers to improve fringe benefits available to older workers (NCCOA).

Repeal the bonus now added to social security benefits for retirement deferred past age 65 (H.R. 3369).

Increase the social security bonus for deferred retirement from 3 to 5 percent of regular retirement benefits (Wertheimer and Zedlewski).

Adjust the social security bonus for deferred retirement so that the increments are actuarially neutral rather than a discouragement to deferred retirement (Feldstein).

Raise the normal retirement age under social security from 65 to 68 (Campbell).

Allow an exemption from payment of the social security payroll tax for workers age 65 and over who are entitled to social security benefits (H.R. 4428).

Change social security retirement provisions to reflect lengthening life spans, better health of older people, and new thinking about how work and leisure should be distributed over the life cycle (Robertson).

For those who defer retirement past age 65, pay social security benefits retroactively to the month of the 65th birthday when such workers do retire (H.R. 2080).

Increase the age limits allowed for contributions by the self-employed to Keogh accounts (H.R. 1357).

c. Social security retirement test

Eliminate the reductions in social security benefits now applicable when beneficiaries between age 62 and 70 have earnings above a certain threshold level (H.R. 113, 21 other bills; Burkhauser and Kimmel; Berry, Garfinkel and Munts; Feldstein).

Eliminate the retirement test for those age 65 and over (S. 1287, S. 1418).

Liberalize the retirement test by: Lowering the benefit offset for an additional dollar earned from 50 to 40 cents (Wertheimer and Zedlewski); increasing the amount of earnings exempt from being offset against benefits (H.R. 1133, H.R. 1192).

Revise the retirement test accounting rules to reduce its impact in certain circumstances (H.R. 779, four other bills).

3. OPTIONS TO INCREASE EDUCATION AND TRAINING OPPORTUNITIES FOR THE AGED

a. Education

Make grants to institutions of higher education to pay tuition for aged individuals (H.R. 624, H.R. 1444).

Require institutions of higher education to make courses available to the aged on a space-available basis (H.R. 698, H.R. 3230).

b. Training

Provide more counseling and job training for persons nearing retirement age (NCCOA).

4. OPTIONS TO INCREASE JOB OPPORTUNITIES FOR OLDER WORKERS

a. Job creation

Create more part-time jobs for older workers (Robertson; Burkhauser and Kimmel; Corbo).

Encourage more use of job-sharing and flexitime to increase older workers' job opportunities (NCCOA).

Create less strenuous public service jobs to attract older workers (Robertson).

b. Employment services

Provide older workers better access to job information through community centers (NCCOA).

Encourage firms' personnel offices to establish links with employment services and educational institutions to aid older workers (NCCOA).

D. System Coordination and Design

1. OPTIONS TO REVISE THE PUBLIC-PRIVATE RELATIONSHIP IN RETIREMENT INCOME PROVISION

a. Incentives to increase individual efforts

Extend income tax credits for a portion of individual savings (H.R. 169).

Permit individual contributions to private annuity plans in lieu of taxation by, and participation in, social security (H.R. 210, four other bills).

Allow contributions to IRA's by pension plan participants (H.R. 628, four other bills).

Extend income tax deductions for contributions to, and earnings of, pension plans not sponsored by employers (S. 575, two other bills; Burkhauser and Kimmel).

Encourage development by financial institutions of reverse annuity mortgages (Gutowski and Feild).

b. Measures to increase the Federal role

Increase the replacement of earnings by social security to compensate for any decline in private provision of retirement income (Robertson).

c. Measures to increase Federal regulation of private pensions

Revise the rules for integration of private pension plans with social security such that the weighting of private pension benefits in favor of higher paid employees is further limited than at present (Shipp).

Require the Pension Benefit Guaranty Corporation to insure certain nonbasic benefits in addition to pension entitlements (H.R. 1570).

Move toward requirement under ERISA of full and immediate vesting by private pension plans (Greenough and King).

d. Measures to encourage private pension offerings

Allow income tax deductions for all individual pension plan contributions (S. 75, two other bills).

Increase flexibility under ERISA for how pension plans meet minimum vesting standards, and allow a phase-in period to reach vesting standards for new plans (Greenough and King).

Adopt public policies designed to encourage private pension offerings (Clark).

e. Options to attain a coordinated public-private pension system

Establish a four-tier retirement income system: (a) SSI at a level that will eliminate poverty; (b) social security to replace earnings below the median wage; (c) social security plus private pensions to replace earnings between the 50th and 85th percentiles in the earnings distribution; (d) social security plus private pensions plus individuals' investment income to replace earnings above the 85th percentile (Clark).

Do not permit public benefits for early retirement before age 62, leaving such benefit offerings to the discretion of private plans (Clark).

Mandate a national private pension system designed to impose on all firms a portable, universal system that meets a set of Federal standards and serves as a supplemental system to social security (Ross).

2. OPTIONS TO REVISE THE FEDERAL ROLE IN PROVISION OF RETIREMENT INCOME FOR PUBLIC EMPLOYEES

a. Social security coverage

Cover all government workers under social security (Robertson; Greenough and King; Munnell and Connolly; NCSW; CRS).

Require all Federal employees to participate in social security (H.R. 536, H.R. 537; Shipp).

Require all new Federal employees to participate in social security (H.R. 2365).

Extend social security coverage to Federal employees on a voluntary basis (H.R. 489).

Require social security coverage of the legislative branch, or Members of Congress, and/or the President and Vice President (H.R. 1601, S. 352, eight other bills).

b. Coordination of social security and public employee retirement

Coordinate credits under social security and civil service retirement for anyone with dual coverage (H.R. 706).

Allow an exchange of earnings credits between social security and public plans for workers with credits under both (Munnell and Connolly).

Convert civil service retirement to a supplemental plan atop the social security base (CBO).

Eliminate provisions under social security that result in "windfall" benefits to government workers (Munnell and Connolly).

c. Federal regulation of public employee retirement plans

Apply the ERISA funding standards to public employee plans (Greenough and King).

Require independent cost estimates for proposed plan changes and proposals for tax increases to cover costs (Greenough and King).

Set normal retirement age at 65 for public plans, with early retirement benefits based on actuarially fair reductions (Greenough and King).

Require that public employee plans be integrated with the social security benefit structure (Greenough and King).

Establish strong standards for: actuarial evaluation using dynamic assumptions; public disclosure; managers' fiduciary behavior (Greenough and King; Munnell and Connolly).

Create a central fund to insure portability of credits among public employee plans (Munnell and Connolly).

Establish a uniform retirement system for all Federal workers, or a credit exchange among Federal plans (Munnell and Connolly).

Set early retirement age higher than at present for police, fire, and military pensions; provide such personnel with higher wages, second-career job training and lower vesting requirements in lieu of the present pension generosity (Munnell and Connolly).

3. OPTIONS TO REVISE THE SOCIAL SECURITY-WELFARE RELATIONSHIP

a. Major system reform

Change the structure of social security to resemble a private annuity, and expand SSI benefits, perhaps to 125 percent or more of the poverty line (Burkhauser; Binstock).

Change the structure of social security to that of an annuity, and replace SSI with a flat grant per aged person (Ozawa; Berry, Garfinkel and Munts; Shipp).

Phase in reforms such as the above by "grandfathering" the current social security entitlements and limiting the new system's applicability only to new wage credits at some future date after enactment (Binstock).

b. Minor program revision

Lower the rate at which social security benefits are offset against SSI benefits from 100 percent to 50 percent to strengthen the relationship between social security benefits and past earnings levels for retirees from low-wage jobs (Burkhauser and Smeeding).

III. POSITIONS TAKEN BY INTEREST GROUPS

A. Background

The policy options discussed in sections I and II were found in legislation, in government studies, and in the writings and testimony of a variety of scholars and pension experts. To gain additional insight into the outlook for policy change, statements were requested from a variety of interest groups on recent positions taken on policy issues concerning income and employment for the aged. Views were sought from organizations representing business, labor, the aged, the pension industry, and pensioners themselves.[1] While the information collected may be incomplete, and most certainly will become dated as circumstances change over time, the following paragraphs outline the policy positions taken by the various groups (or their spokespersons) in recent months.

B. Business Organizations

1. NATIONAL ASSOCIATION OF MANUFACTURERS (NAM)

NAM emphasizes economic growth and control of inflation as important measures to insure the adequacy of income in retirement. They favor measures to encourage further development and improvement of individual and group private pension plans.

[1] Information was requested but not yet received from the American Association of Retired Persons, the National Center for Voluntary Action, The National Council of Senior Citizens, and The National Association of Retired Federal Employees.

With respect to social security, NAM favors retention of the present financing methods and benefit structure but with two significant changes:

—Elimination to the extent practical of sex-related differences in how the system treats individuals; and

—Extension of coverage to all public employees.

NAM advocates retention of a needs-related welfare program for the aged administered at the State level.

In testimony on a pending bill to amend ERISA (S. 209), NAM representatives argued for the following:

—That no major amendments should be made to ERISA to require pension plan changes or further restrict flexibility in plan development.

—That offsets of workers' compensation benefits against pension benefits should not be prohibited as S. 209 would require.

—That survivors' annuities should not be mandated for survivors of vested participants who die before retirement age.

—That requirements for full advance funding of benefits not be extended to plan provisions not yet in force.

—That employee contributions to plans should be tax deductible, but not under the discrimination standards S. 209 would set for pension plan eligibility.

2. CHAMBER OF COMMERCE

The Chamber of Commerce advocates legislation to make private retirement savings more attractive from the viewpoints of cost of compliance, plan administration, and tax incentives. A broadening of IRA eligibility to include pension plan participants is favored, as is an increase in the IRA contribution ceiling and automatic future adjustments in the ceiling amount.

In regard to social security, the Chamber of Commerce favors a continuation of the basic principles of the system and current rates of wage replacement. General revenue financing, even if restricted to medicare, is opposed. The Chamber of Commerce regards family issues, the retirement age, and long-term financing methods and revenue sources as topics requiring further studies. Specific positions taken on social security issues include:

—Support of universal coverage.

—Repeal of ad hoc increases in the wage base ceiling not yet in effect.

—Retention of the retirement test in its present form.

—Retention of the present benefit formulas for early and late retirement.

—Opposition to expansion of benefits.

—Support for cutbacks in student benefits and the minimum benefit.

On two labor issues regarding pensions, the Chamber of Commerce opposes H.R. 1145 that would include retired employees within the labor pool covered by collective bargaining agreements, and pension plan investment policies to promote union interests are opposed.

On S. 209, the Chamber of Commerce opposes the bill as introduced. Positions on workers' compensation offsets, survivors' benefits requirements, and deductibility of employee contributions are the same as outlined above for NAM. The Chamber of Commerce also singled out for opposition an S. 209 provision for tax credits as incentives for starting pension plans by small employers.

C. Labor Organizations

1. AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES (AFGE)

On the preeminent issue of universal coverage of public employees, AFGE urges that action be deferred until the various issues raised have been studied thoroughly. A merger of the U.S. civil service retirement system with the social security system is thought to be unwise. AFGE would favor a reduction in the complexity of Federal employee retirement through consolidation of groupings of similar plans.

With respect to cost-of-living adjustments, AFGE argues that social security increases should be made semiannually like those for civil service retirees. If Congress were to change the civil service adjustments to an annual basis like social security, then AFGE favors making civil service retirement benefits nontaxable to treat them the same as social security benefits.

AFGE favors repeal of two recent cutbacks in Federal employee pensions—the elimination of the extra 1 percent that used to be added to cost-of-living adjustments, and the offset of pensions against spouse social security benefits.

2. AMERICAN FEDERATION OF STATE, COUNTY AND MUNICIPAL EMPLOYEES (AFSCME)

AFSCME supports coverage of government workers by social security generally, but has not endorsed any specific proposal or bill.

The other issue of greatest concern to AFSCME—viz, Federal regulation of government pension plans in a manner similar to ERISA for private plans—has not been addressed in detail since the expected legislation has not yet been considered in Congress. AFSCME would likely oppose certain ERISA-type provisions if applied to State and local government plans, especially required funding standards.

3. AMERICAN FEDERATION OF LABOR-CONGRESS OF INDUSTRIAL ORGANIZATIONS (AFL–CIO)

The AFL–CIO prefers that social security become a national public retirement system that can provide by itself a decent income in old age. While recognizing that current private pension plans cannot be totally replaced by social security, the AFL–CIO feels that private plans should not be expected to play a larger role in the future.

Financing of increased social security costs would be provided in two ways—by removing the ceiling on the wage base to which the employer tax applies; and by introduction of general revenues into the system, eventually amounting to a third of total system revenues. The payroll tax rate would not be raised. General revenues would be

funnelled into all the social security programs, not concentrated in the disability program or medicare as some have proposed.

The AFL–CIO advocates improvements in social security to help the most disadvantaged and those with the least pension coverage rather than across-the-board benefit increases. Examples of such improvements are:

—An increase in the special minimum benefit to the poverty line, with the amount indexed thereafter.
—Greater wage-replacement rates for workers below the median wage.
—A closer relationship between benefits and recent earnings, perhaps through increasing the number of drop-out years in benefit computation or by basing benefits on the high-5 or high-10 years.
—Elimination of remaining differences based on sex.
—Elimination of the recent work test in establishing eligibility for disability benefits.
—Benefit eligibility at any age without actuarial reduction for disabled widows and disabled surviving divorced wives.
—Benefits for disabled spouses of beneficiaries.
—Optional computation of benefits for couples based on combined earnings not in excess of wage base maxima.

The AFL–CIO wants to retain the retirement test without undue liberalizations. Better treatment of early retirees is favored through dealing with disability and unemployment problems. One approach mentioned is to apply an occupational, rather than solely a physical, definition of disability after age 60 and pay those who qualify an early retirement benefit that is not subject to the full actuarial reduction usually applied. Another approach would be to start social security eligibility after a person over age 55 has been unemployed continuously for 2 years.

In the welfare area, the AFL–CIO feels that development of a national policy is needed for the very old with respect to income and long-term care. The AFL–CIO advocates several specific improvements in the SSI program:

—Benefits should be raised to the poverty line, and eventually increased to correspond to the BLS lower living standard budget for a family of four.
—SSI benefits should not be reduced on account of residence with family members when an elderly recipient is also disabled.
—An extra disability allowance should be paid under SSI, perhaps targeted on the oldest age groups (e.g., 75 and older).

In regard to other benefits, the AFL–CIO:

—Advocates a comprehensive national health insurance plan.
—Favors expansion of section 202 housing for the elderly.
—Argues for placement of service and long-term care facilities in neighborhoods easy to access by the low-income elderly.
—Urges training of older workers and job development and referral services under the Older Americans Act.
—Favors expansion of title IX public service jobs under the Older Americans Act.
—Argues that social services programs for the elderly should hire more older workers.

D. Aged and Retirees' Organizations

The American Association of Homes for the Aging favors an increase in SSI benefit levels. They have testified in favor of a Federal payment level of $3,000 annually for an aged individual, and $4,500 for an aged couple.

Bruce Miller of the National Senior Citizens Law Center of Los Angeles spoke in opposition to the social security cost savings proposals put forth in President Carter's 1980 budget. He favors greater use of general revenues to finance social security.

The Pension Rights Center generally favors proposals that would broaden pension coverage, raise retirement incomes to more adequate levels, and offer greater legal and financial protection of benefit entitlements.

E. Pension Industry Organizations

1. AMERICAN SOCIETY OF PENSION ACTUARIES (ASPA)

ASPA favors incentives for firms to establish new "defined benefit" pension plans. Such incentives could be provided through tax credits, changes in IRS qualifying rules for tax exemptions, or the pension Benefit Guaranty Corporation's premium rate structure.

ASPA opposes the change in the IRS rules for integration of private pension benefit structures with social security proposed by President Carter. The preferred approach to integration would yield the same wage-replacement rate from private pension and social security benefits combined across all wage levels. Changes should be sought to make integration rules easier to understand and administer and to facilitate updating for changes in social security over time.

ASPA opposes any ERISA provision to require automatic cost-of-living adjustments in private pension benefits.

In regard to S. 209 and related bills, ASPA has taken the following positions:

—Survivors' benefits should not be mandated for survivors of vested participants who die before retirement age.

—Tax credits are favored to encourage small businesses to start pension plans, but eligibility should not be based on size of profit.

—Tax deductibility for employee contributions to qualified plans is supported, but ASPA would apply deductibility to all contributions whether or not mandatory. A higher limit on contributions is suggested ($1,500 or 15 percent of pay), with the limit indexed for inflation. ASPA's position is taken both to increase pension coverage and availability of investment capital.

2. AMERICAN COUNCIL OF LIFE INSURANCE (ACLI)

The ACLI advocates constraints on social security costs and favorable conditions for growth in private pension plans and individual savings. Social security reforms that would result in large infusions of general revenues (e.g., the "double-decker" proposal) are opposed. The ACLI prefers continued reliance on the payroll tax but argues for a reduction in, or elimination of, the 1981 increase in the wage base.

On other social security issues, the ACLI position is:

—To keep the retirement test in its present form, but consider raising the normal retirement age by the next century.

—To extend social security coverage to all workers, with protection for benefits earned and contributions made by participants in non-covered retirement systems, and with elimination of gaps in protection that now exist for such participants.

The ACLI regards existing tax benefits for pension plans not as tax preferences but as a way to avoid double taxation of savings. Enactment of new tax incentives to encourage development of new pension plans is favored.

On the issue of whether pension benefits should differ by sex based on differences in longevity, the ACLI favors the "either-or rule," which allows an employer to make equal contributions on behalf of male and female employees, thereby buying different levels of protection in terms of annual benefits.

With respect to nonpension retirement plans, the ACLI favors a provision in S. 557 to broaden IRA eligibility. The ACLI would extend eligibility to any pension plan participant. Increasing and indexing the limits on contributions to IRA's and Keogh accounts is also advocated.

In regard to S. 209, the ACLI opposes the provision to require survivors' benefits in cases where vested participants die before retirement age. The ACLI would accept such a requirement if only applied on behalf of participants with at least 10 years of service who die after reaching age 45 or 50. The S. 209 provision on tax deductibility of employee contributions is opposed.

With respect to how private pension plans are integrated with social security, the ACLI position is that social security should constitute only a basic floor of protection. The combined social security-private pension benefit amount should be the relevant quantity for qualification of a plan for tax-exempt status. The Carter administration proposal to change the IRS integration rules is opposed. The ACLI would like to see present integration methods simplified and made more practical.

F. Other Organizations

The National Governors Association (NGA) is opposed to Federal regulation of State and local employee pension plans. Instead they advocate improvements by States at their own initiative in the following areas—reporting and disclosure, regular independent audits, regular actuarial evaluations, adequate funding, elimination of benefit abuses, guidelines for fiduciary conduct, plan consolidation, and portability of credits.

In the welfare area, the NGA favors making benefits available to all in need, with benefit levels related to the poverty line. They argue that welfare reform for the aged should be pursued in the context of overall social security benefit reforms.

The NGA feels that job programs for older workers should be better coordinated at the State level. Such jobs are created under both the CETA program and the Older Americans Act with little coordination for joint efforts.

IV. SUMMARY DISCUSSION OF POLICY OPTIONS

A. Conflicts Among Objectives

The proposals and policy options outlined in the three preceding sections are, not surprisingly, replete with conflicting objectives. These conflicts are not solely the product of the varied sources of these ideas for change, however. Even a single, carefully designed reform proposal may well embody unresolved roadblocks that stand in the way of achieving all the reformer's goals, since cost constraints, benefit adequacy, equity in treatment of subgroups, work incentives, savings incentives, and system coordination cannot be achieved simultaneously to anyone's full satisfaction. Described below are the principal dilemmas with which policymakers must contend in fashioning legislative proposals to resolve the major issues of income and employment of the aged.

1. PROGRAM COSTS VERSUS FUNDING LIMITS

Unless offset with unpopular benefit reductions, most of the major policy options mean greater costs for public programs and/or private plans, or less tax revenues collected by governments. Increased SSI benefits, elimination of the social security retirement test, higher social security benefits for two-earner couples, more portability of pension plan credits, tax incentives for private saving—all such options would generate substantial costs at a time when the costs of current benefits are rising and greater funding for retirement income and aged benefits is difficult to obtain.

A number of proposals are directed toward reductions in payroll taxes, with greater use of general government revenues to fund retirement benefits. However, existing claims on general revenues are regarded as excessive by a good many political leaders and economists, and Congress will be faced with mounting pressures for tax cuts to mitigate the boosting of taxpayers into higher tax brackets by inflation. Also, increased Federal spending for new investments in energy production and defense capability seems likely over the next few years. Enactment of a new tax, such as a value-added tax, will meet with great resistance, especially during an inflationary period. Thus, a tax shift may only lead to even tighter pressure on the costs of social security and result ultimately in applying means tests for whatever portion of benefits is supported by general revenues.

In the private sector, some firms have already been hard-pressed to meet the ERISA standards for advance funding of benefits, and ERISA has been blamed as a factor in some plan terminations. The numerous proposals to set even stronger Federal standards for private plan coverage and benefit rules would add to the cost squeeze on firms at a time when the outlook for real economic growth is not optimistic. The net result of cost pressures on firms could well be a smaller role for private plans, or a Federal subsidy of these plans, with increased public interest in expanding social security into a full-blown retirement income system.

2. BENEFIT ADEQUACY VERSUS FAIRNESS AMONG GROUPS

Improving the adequacy of retirement income and benefits often works against considerations of equity. A prime example is offered by proposals to raise SSI benefit levels without changing the relationship of SSI to social security. Since social security benefits are deducted dollar-for-dollar from SSI benefits after the first $20 a month, an increase in SSI will increase the number of social security beneficiaries for whom the net addition to total monthly income derived from the wage-related social security benefit is only $20. The effect is to diminish the wage-related benefit differential among social security beneficiaries and reduce the system's rewards for a lifetime of work.

To cite a contrasting example, efforts to improve the fairness of treatment of a certain group may result in less adequate benefits for those most in need. The best case in point is the issue of how to make social security a more rewarding system for women who work but who often gain little or nothing relative to their entitlements as spouses of retired workers. Some proposals to revise the treatment of two-earner couples would result in lower future entitlements for one-earner couples, some of whom would have inadequate incomes for retirement.

Given the financial pressures on social security, almost all the identified policy options that result in benefit increases are aimed at helping those who are worst off or reducing the greatest perceived inequities. There is no interest in using scarce resources for across-the-board increases to all beneficiaries. The same is generally true for other programs as well. Thus, the examples cited above of the tradeoff between benefit adequacy and fairness are quite typical of the considerations policymakers will continually be asked to confront for some time to come.

3. RETIREMENT INCENTIVES VERSUS WORK INCENTIVES

Retirement incentives and work incentives for older workers are mirror images, an increase in one amounting to a decrease in the other. Thus, the goals held by different observers and policymakers are in direct conflict here. Increases in coverage or benefits or reduced service or age eligibility requirements will encourage retirement; liberalized mandatory retirement laws and retirement tests and increased credits for deferred retirement will encourage work.

Furthermore, there are three separate issues involved to which conflicting solutions may be proposed. The issues concern early retirement rules, benefit reductions for income earned after pension acceptance (the retirement test), and late retirement rules. Raising the mandatory retirement age while continuing to encourage early retirement and discourage late retirement is one such example. Another is provided by the Stokes bills described in section I. They would lower the retirement age for some beneficiaries, which would encourage earlier retirement, but, on the other hand, the retirement test would be eliminated, which would encourage postretirement work.

Provisions of work incentives for older workers also conflicts with the goal of benefit adequacy. Initiatives to increase retirement or welfare benefits make it possible for many people to live comfortably

while working less. On the other hand, lowering welfare benefits or social security wage replacement rates would constitute an approach, albeit an unpopular one, to strengthen work incentives by making retirement less feasible.

4. PRIVATE SAVING VERSUS FEDERAL REGULATION

The policy options presented in this paper reflect two often contrary notions about the role of the private sector in the provision of retirement income. One is that private saving should be encouraged, and proposals abound for tax breaks for contributions to private annuities for income received from investments; there are even proposals that individuals be permitted to contribute to annuity plans in lieu of social security tax payments with contributions excluded from taxable income. However, there is also a great deal of interest in measures to go further than the present ERISA in setting national standards for private plans with respect to vesting, portability, inflation protection, survivors' rights, and benefit formulas.

While both sets of options ostensibly would increase reliance on private income sources, they represent conflicting demands on the funds available for private investment, and each approach would tend to undermine the present employer-based pension system. The first approach would lessen the importance of employer plans to employees by increasing individuals' options for acquiring retirement assets. The second approach would probably either lessen voluntary pension plan offerings (if firms had to bear the increased costs involved) or convert pension plans into appendages to social security (if government helped bear added costs, since subsidies would likely be accompanied by public control).

5. EFFICIENCY VERSUS UNIVERSALITY

This issue is a concern of all government benefit programs. That is, should all individuals (or all within some broad category, such as all aged) receive the same benefits, or should benefits be targeted on individuals in need? The former approach involves larger public transfer payments and the requisite taxes, but is often accompanied by greater public acceptability. The latter approach requires less public funding to achieve a given reduction in individual needs, but means-tested programs are often held in low regard by both taxpayers and recipients, and incentives are created which may retard self-help efforts in the long run.

Social security represents the universal approach in providing income to the aged, and SSI is the cornerstone of means-tested aid to the aged. The policy options identified reflect different emphases on these two approaches for public income transfers to the aged. In fact, the two most far-reaching ideas for restructuring social security represent pure applications of the two different notions. The "double-decker" proposal would eliminate means-testing for the aged, give every aged person a flat amount per capita, and convert social security into a retirement annuity. The contrasting approach would expand SSI benefits, strip away "welfare aspects" of social security (e.g., the minimum floor under benefit amounts), and likewise convert the residual social security system into an annuity-like retirement benefit.

6. SYSTEM REFORMS VERSUS RETIREMENT PLANNING

Individuals' financial plans for retirement must be made over long-time periods, since career decisions and savings behavior are lifelong processes. The rules established by social security and pension plans play a major role in that individual planning in terms of expected retirement age and financial needs in retirement. Thus, major reforms in retirement systems have to be phased in over fairly long time periods to avoid undue disruptions in the financial circumstances of people too near retirement age to adjust their behavior to a new situation.

Funding of retirement systems must also be planned over a long-time horizon, not only for advance-funded private plans but for a pay-as-you-go system like social security as well. A long-term financial plan for social security is needed to assure the availability of future benefits for today's workers without frequent major adjustments in tax rates.

Unfortunately, such long-term planning is not a strong point of our budgetary system. The President's budget request and associated legislative proposals are submitted only 8 full months before the fiscal year begins, and the congressional budgeting timetable is even shorter. This procedural schedule, coupled with the natural tendency of lawmakers to focus on issues with immediate impact, makes sustained action toward major reform goals difficult to achieve, given the lengthy time frames desirable for such reforms. The net result often is that incremental changes take precedent over major reforms; single-issue proposals, such as liberalization of the retirement test, are easier to act on than is a more complex restructuring of retirement ages and incentives to retire. Divided committee jurisdiction, with ERISA and Federal employee pensions handled by different committees with still others having jurisdiction over taxes and social security, also biases legislative action in favor of incremental change. Inaction throughout the 1970's on major welfare and health legislation, where the time horizons and issues involved were more immediate, serves to underscore this point.

B. Major Gaps in Identified Policy Options

The wide variety of options identified in the preceding sections cover a tremendous range of possible new public policy initiatives. Still, there are areas of potential policy change that have not been explored in the sources available to the author. Further, some major policy options that have been put forward have never been crafted in the form of detailed proposals that can be considered seriously by Congress. The four most significant areas where policy initiatives seem to be the least developed are discussed below.

1. BENEFIT REDUCTIONS

The identified policy options indicate great interest in resolving the projected financing problems of social security. But one general approach—viz, long-run reductions in benefits—has not been given the same degree of attention as tax proposals, presumably owing to the lack of popular support for such options.

President Carter's 1980 budget put forth a few cost saving proposals, but they were limited to those which would have immediate effects;

these proposals did not reappear in the 1981 budget. Testimony by Congressional Budget Director Alice Rivlin also suggested a few short-term savings methods as alternatives to tax proposals. During the 1977 debate over indexing social security wage credits, a proposal to index by price rather than wage changes, which would result in a smaller social security program, was considered by Congress and rejected. Finally, several policy ideas which call for reducing the "welfare aspects" of social security in favor of greater reliance on SSI could result in savings, but a lack of specificity precludes quantitative assessment of their potential as solutions to the financing problem.

Given the variety of approaches to social security reforms that could achieve substantial long-run cost reductions, these need to be developed as a concerted strategy that could forestall new taxes or permit tax reductions. These possible approaches include:

—Greater use of means-testing for selected benefits.
—Revised incentives to discourage early retirement.
—Gradual reductions in wage-replacement rates, perhaps linked to policies to encourage private savings and improve pension plans.
—Limitations on the size of inflation-linked benefit adjustments.
—Integration of social security with public employee pension benefits to prevent overpensioning and "windfall" benefits.

No existing proposal has been designed that would package several of these policy changes as a conscious approach to tax limitation. Specification of such an approach would also be useful for those interested in policies to encourage greater reliance on the private sector in provision of income for retirement.

2. IMPROVED COVERAGE AND INFLATION PROTECTION IN EMPLOYEE PLANS

As may be seen from the options listed in section II, there is a great deal of concern about the lack of protection against inflation afforded under employer pension plans. Also of concern is the fact that the design of pension benefit formulas and the lack of portability of credits among plans results in too great a variation in the degree of wage replacement between a firm's long-term employees and those who work for several firms before retirement. While improvements have been advocated, detailed ideas on ways to achieve the desired results are lacking.

An approach that relies on exhortations of employers cannot be expected to bring about change; even strengthening ERISA rules would be of limited utility, since the increased cost to firms might result in cutbacks of other pension benefits. Options that call for stronger pension standards will need to be designed with Federal participation built in, in the form of subsidized inflation protection and/or an administrative role in the transfer of credits among plans.

3. REVISED RETIREMENT INCENTIVES IN PRIVATE PENSION PLANS

Many options have been offered to reduce incentives for early retirement or increase delayed retirements under social security. Likewise, a number of such proposals were identified with respect to public employee retirement systems. However, private plans have been mostly ignored in this regard.

While social security is the dominant source of retirement income, clearly the rules governing private pension benefit eligibility help determine individual retirement decisions. Most private plans permit early retirement, and the majority offer early retirement benefits designed to induce early retirement. On the other hand, few plans encourage delayed retirements beyond age 65. Even with the raising of the allowable mandatory retirement age from 65 to 70, firms may refuse to grant pension credits for years worked past age 65.

The interest in reshaping private pensions has run mainly toward ways to increase coverage. Future proposal development should come up with options to revise private retirement incentives through public regulation.

4. SPECIFIC PROPOSALS FOR REVISION OF SSI-SOCIAL SECURITY RELATIONSHIP

It has been proposed by several experts that social security be reformed into a benefit structure resembling a private annuity with benefits closely related to individual earnings. The welfare role of social security would be borne, at least in part, by a flat grant for each aged person or by an expanded SSI program. One such proposal of the former type has been designed as the "double-decker" option of the HEW Task Force on Social Security and the Treatment of Women.

However, no proposal of comparable specificity has been developed for a restructured SSI-social security system. Since such a system would no doubt leave some current beneficiaries worse off, methods of transitioning into such a system need to be designed. Also, the integration of SSI and social security benefit levels, how SSI would supplement social security, how each program would treat earnings by beneficiaries, and how retirement incentives would be designed for the programs in combination are all important issues to be addressed.

C. Relationship of Policy Options to Economic Trends

The body of policy options of interest at any point in time can change quickly as the forces which precipitated that interest intensify or moderate over time. Policy options of interest related to income and employment are particularly shaped by the future economic outlook, and the options described earlier often reflect the responses to economic change that the authors of those options anticipate will be needed. Of course, the economic outlook, even in the short run, sometimes changes rapidly, and the efficacy of particular policy responses to economic change will be evaluated differently over time. The following discussion identifies issue areas where such reevaluation would be most crucial in the event of altered economic developments.

1. FISCAL LIMITS ON SOCIAL SECURITY

Options for change in the social security system are dominated by the projected shortfall in trust fund revenues. The tight funding situation largely depends on future growth in real wages and whether or not a period of high fertility rates materializes. A relaxation of fiscal pressure might mean a decline of interest in revising social security financing and a resurgence of proposals to raise benefits. On the other

hand, a major economic depression could intensify interest in financing and bring forth more radical proposals for restructuring benefits as well.

2. COST SQUEEZE ON PRIVATE PLANS

Although private plans are advance funded and thus not as subject to financing crises as social security, they are limited in their ability to accommodate to changing needs of their participants, since funding availability limits are imposed by the performance of the economy. If better economic performance enhanced the earnings of pension fund assets and increased opportunities for employee bargaining for pension liberalizations, much of the interest in policy options to extend public regulation of private plans might diminish.

3. AGING OF THE WORK FORCE

A good deal of current interest in changing policy is dictated by the anticipated aging of the work force. Much attention is being given to measures to extend working lives through revised financial incentives, liberalized mandatory retirement rules, and subsidies for second-career training or education. However, at least two factors now difficult to anticipate could lessen these concerns. First, the extent of illegal immigration is unknown, and whether young immigrants will become a permanent part of the work force is purely speculative. A continued presence could enlarge the pool of young workers substantially beyond that which is now projected. Second, older workers may continue working longer independent of any policy change, simply due to fears of inflation or as a result of much better health, thus nullifying the need to entice or coerce older workers to stay in the labor force.

4. NEED FOR PRIVATE INVESTMENT FUNDS

In part, the interest in encouraging increased saving (e.g., by advance funding social security, or through tax incentives for contributions to annuities) grows out of a concern that society as a whole is saving too little, with the result that investment capital is insufficient to meet national needs. But availability of investment capital may be more sensitive to foreign investments, stock market performance, or inflationary expectations than to changes in tax laws, and critical investment needs (e.g., in energy production) may stimulate special efforts to capture the funds needed for such purposes. Thus, the national saving rate could fade away as a consideration in whether to boost the amount of capital supporting promised retirement benefits.

5. FEMALE LABOR FORCE PARTICIPATION

One of the most active areas of policy debate concerns the treatment of women by social security and employer pension plans. In part, this interest is an outgrowth of more general concerns regarding women's rights, but interest has been heightened in women's retirement issues by the rising female labor force participation rate and women's greater stake in pension coverage. The social security issues largely arise from the family oriented benefit structure and the fact that most

married women having lower lifetime earnings than their husbands, receive, at best, only marginal returns from social security for working. Employer pension issues for women stem mainly from their occupational crowding in jobs which are less likely to have pension coverage and from women being more likely than men to experience breaks in service, have shorter careers and change jobs.

Over time, the nature of women's labor force experience relative to men's could change in ways that would serve to mitigate these issues. That is, the career commitment of women could become more similar to that of men, wages differentials by sex may tend to diminish, and women may succeed in entering male-dominated occupations to an extent that occupational crowding is reduced.

6. IMPACT OF INFLATION ON INCOME

The effect of high inflation rates on interest in policy change is considerable. Concern about inflation is reflected in options to limit automatic adjustments to achieve cost savings, to liberalize such adjustments to offer beneficiaries better protection, to improve inflation protection for private pension beneficiaries, and to extend working lives and shorten periods spent in retirement. Whether inflation will continue at high rates, and for how long, cannot be predicted, being subject to change due to governmental policies, international events, and economic behavior of individuals and firms. A change in the present outlook and a return to levels of inflation experienced in the 1950's and early 1960's would certainly serve to deemphasize the above-mentioned policy concerns.

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APPENDIX

CURRENT AND RECENTLY COMPLETED RESEARCH

The research projects in this appendix were identified by staff of The Urban Institute in the summer of 1979 as the current and most recent studies related to major policy issues of income and employment of older Americans.

The projects chosen for this compilation have been organized according to the issue structure used in section I of this report. The main emphases on the selection of projects were on their currency and their relatedness to policy issues. The specific criteria used in the selection are as follows:

(1) Projects selected are either ongoing or have been completed since December 31, 1977.

(2) Projects chosen involve both analysis and either collection of new data or generation of new information from existing data (thus, literature reviews, policy option papers and the like were excluded).

(3) Selected projects involve research concerning issues of income and/or employment of older Americans; and

(4) The research relates to furthering knowledge about major policy issues rather than issues of benefit administration.

In compiling information on the selected projects, Urban Institute staff found several previous research summaries extremely helpful. These summaries were prepared by: Thomas Gustafson of the Office of the Assistant Secretary for Planning and Evaluation, Department of Health, Education, and Welfare; staff of the National Commission on Social Security; and staff of the National Planning Association. Another valuable source for this material was a draft report of the Employee Benefit Research Institute ("An Annotated Bibliography of Selected Recent Research on Retirement Income Programs," review draft, June 1979).

In an effort to obtain as complete a listing of current research as possible, Urban Institute staff consulted 10 experts in the research areas of interest. Their cooperation and advice are gratefully acknowledged. The 10 experts who lent their assistance in reviewing a draft of this report are:

John Brittain, Brookings Institution.
Richard Burkhauser, Vanderbilt University.
John Carroll, Social Security Administration.
Robert Clark, North Carolina State University.
Dan McGill, University of Pennsylvania.
Marilyn Moon, University of Wisconsin (Milwaukee).
Alicia Munnell, Federal Reserve Bank of Boston.
Jim Schulz, Brandeis University
William Serow, University of Virginia.
Tom Woodruff, President's Commission on Pension Policy.

EXPLANATION OF ENTRIES

Each research project summary is listed within the major policy issue to which it is most relevant, although some projects address more than one issue area. The issue category titles are identified by Roman numerals and capital letters, with the project summaries listed numerically, alphabetized by the institution where the research is being (or has been) done.

The summaries presented are displayed in the following format:
Project title.
Institution; principal investigator.
Sponsoring organization; starting date-completion date (if known).
Abstract.

Frequently cited abbreviations are as follows:

ADEA: Age Discrimination in Employment Act.
CBO: Congressional Budget Office.
CPS: Current population survey (periodic census surveys).
DOL/BLS: Department of Labor; Bureau of Labor Statistics.
DOL/ESA: Department of Labor; Employment Standards Administration.
DOL/ETA: Department of Labor; Employment and Training Administration.
DOL/PWBP: Department of Labor; Office of Pension and Welfare Benefit Programs.
DYNASIM: Dynamic simulation of income model.
ERISA: Employee Retirement Income Security Act (1974).
GAO: General Accounting Office.
HEW/AoA: Department of Health, Education, and Welfare; Administration on Aging.
HEW/ASPE: Department of Health, Education, and Welfare; Office of the Assistant Secretary for Planning and Evaluation.
HEW/NIA: Department of Health, Education, and Welfare; National Institute on Aging.
HEW/SSA/ORS: Department of Health, Education, and Welfare; Social Security Administration; Office of Research and Statistics.
HUD: Department of Housing and Urban Development.
IRS: Internal Revenue Service.
NLS: National longitudinal survey.
OASDI: Old age, survivors and disability insurance (the cash benefits program of social security).
OPM: Office of Personnel Management.
MPSID: Michigan Panel Study of Income Dynamics.
RHS: Retirement history survey.
SIE: Survey of income and education.
SSI: Supplemental security income (welfare program for the aged, blind, and disabled).

RESEARCH PROJECT SUMMARIES

I. Issues of Benefit Adequacy and Fairness

A. ADEQUACY OF RETIREMENT INCOME AND BENEFITS FOR THE AGED

(1) Levels of Private Pension Benefits. Arthur Young and Co. (Washington, D.C.); Mike Hooban; DOL/PWBP and HEW/SSA; September 1978–September 1979.

Data will be obtained from a sample of pension plans and cross-checked against social security records to create a multipurpose computer file able to support a wide range of retirement income studies. Major areas analyzed will include plan benefit formulas (including integration provisions), total replacement rates, and changes in retirement income over time. A sample size of 1,500 plans (with an expected response rate of 80 percent) will be surveyed to collect benefit amounts paid to beneficiaries.

(2) Economic Impact of Private Pensions. Brandeis University (Waltham, Mass.); James Schulz; National Science Foundation; May 1976–January 1979.

Basic analytical work was undertaken to investigate the major characteristics of private pension plans. Coverage and benefit formulas are included. In addition, work was carried out to investigate the distribution of tenure in the United States and the incidence of job change, both using multiple regression techniques. Based on this initial work, a preliminary private pension model was constructed to be added to The Urban Institute's DYNASIM model.

(3) Private Pensions Fall Far Short of Preretirement Income Levels. Brandeis University (Waltham, Mass.); James Schulz, Thomas Leavitt, Leslie Kelly; February 1979.

The authors base their findings on a 1974 BLS study of 989 retirement plans, covering 100 workers or more, which had sufficiently definable contributions and benefits. Benefits were simulated for a median income male and female earner at 20 and 30 years of service, and the replacement rates of post- to preretirement income were calculated. Replacement rates varied widely, tended not to exceed 28 percent on average, were higher for women (although their earnings and benefit levels were lower), varied by industry, and were lower in multiemployer plans. Replacement rates for single and married workers were calculated with social security added in, and very few nonmarried workers achieved the 70-percent standard.

(4) Private Pension Policy Simulation. Brandeis University (Waltham, Mass); James Schulz; DOL/PWBP; June 1977–September 1979.

This project is adding a private pension module to The Urban Institute's DYNASIM model. The module is fully specified and is now in the validation stages. It will be used to investigate the following issues: (1) Economic status of the social security-only population; (2) level and distribution of private pension benefits; (3) adequacy of pension benefits; (4) special problems of women; (5) impact of alternative vesting provisions. This is a followup for "Economic Impact of Private Pensions" by the same investigator.

(5) Private Pensions and the Economic Status of the Aged. Brookings Institution (Washington, D.C.); John A. Brittain; DOL; completed 1979.

The objective of this study was to evaluate empirically the importance of private pension benefits as a source of the income of aged couples and individuals. The role of private pensions is compared to that of social security benefits and other income sources in generating the incomes of aged persons. The degree of dependence of the elderly on both types of pensions is also assessed in terms of the contribution of these pensions to their absolute and relative economic status. Variations by age, and the effects of taxes and income in kind are considered as qualifications of the income analysis. Finally, the role

of pensions in financing consumption and maintaining preretirement living standards is evaluated.

(6) The Economics of Private Pension Programs. Brookings Institution (Washington, D.C.); John A. Brittain, Alicia H. Munnell.

Issues covered in this monograph include funding of pensions and investment policy; financial effects on companies; demand for pensions and the incidence of pension costs; income maintenance and the effects on personal income and wealth distribution; tax treatment of pension programs; the effects of inflation and indexing; effects on saving and investment; relationship with other retirement programs (especially social security); and the increasing tendency for social security to substitute for private pensions.

(7) Development of a Pension Plan/Social Security Model. CRS (in-house); Ray Schmitt; completion spring 1980.

This project involves the development of a pension and social security model to examine income replacement rates, pre- and post-taxes. The model has been designed to calculate social security benefits according to old, new, and transitionary formulas, and pension benefits under any type of benefit or contribution formula. Similarly, "replacement rates" may be defined in numerous ways so that replacement can be based on final year's earnings, or some other definition. The model will accept real or synthetic wage data.

(8) Pension Plan Protection Survey. HEW/SSA/ORS and DOL/PWBP (in-house); in progress.

A special supplement to the CPS (May 1979) will be used to gather data on private pension plan coverage and vesting, and on the use of IRA and Keough provisions. These data will provide new benchmark estimates of the level of retirement income protection provided by private plans, as well as information on such changes since ERISA. The data can be used to explore coverage gaps and overlaps.

(9) Private Pension Benefit Trends. HEW/SSA/ORS (in-house); in progress.

A number of illustrative private pension plans will be examined to determine the improvement between 1968 and 1976 in the relationship of benefits to preretirement wages.

(10) Preparatory Studies for Re-Drafting BLS Family Budgets. Institute for Research on Poverty (Madison, Wisc.); Harold Watts; DOL/BLS; completion January 1980.

This study provides a methodology necessary for drawing up new budgets. Present budgets are based on the 1960–61 survey of consumer expenditures, and are drawn up only for an urban family of four and for a retired couple over age 65.

(11) American Attitudes Toward Pensions and Retirement. Louis Harris and Associates (New York, N.Y.); Johnson and Higgins; completed 1979.

1,330 current full-time employees, as well as 397 who had retired from full-time work, and 212 financial executives of the Fortune 1,000 list who deal with pension and retirement problems were surveyed for a nationwide study. The survey provided considerable information concerning public attitudes toward retirement and its financial requirements, characteristics of pension plans, and the ultimate willingness of future generations to pay social security retirement benefits to retired individuals.

(12) Inflation and Pension Plans. Math Tech (Princeton, N.J.); Donald Wise; DOL/PWBP; completion fall 1979.

This is part of a larger econometric study, "The Role of Private Pensions in Meeting Economic Security Needs of the Nation." It provides an analysis of the impact of inflation on current retirees. Data source: RHS.

(13) Retirement Income Research Project. Math Tech (Princeton, N.J.); The Hendrickson Corp., ICF; William Morrill; EBRI; begun August 1979.

This research project will examine three major issues: (1) What retirement income goals should be established for individuals during retirement; (2) what mix of public and private retirement income programs should be employed to meet those goals; and (3) what funding methods should be used to finance these benefits. The short- and long-term implications of these policy questions will be examined in terms of the economic and distributional effects on different income and population groups.

(14) Measurement of Intra-family Transfers and Their Effect on Individual Behavior. National Bureau of Economic Research (Stanford, California); Mordecai Kurz, Marcy Arvin; HEW/AoA; October 1, 1978–October 1, 1979.

The objectives of this study include the development and testing of a variety of techniques for the measurement of intrafamily transfers to assess their utility and feasibility. A model will be developed to determine the probable amount, direction and type of transfers. A limited number of studies will be used to test and validate the model.

The model will be based on Samuelson's consumption-loan model with several modified assumptions. The study will address the following questions: (1) What are the mechanics by which data on amounts of intragenerational transfers can be obtained; (2) what are the behavioral characteristics that determine size and direction of transfers; and (3) how do public transfers influence intrafamily transfers.

(15) The Wealth-Age Relation Among the Aged. SUNY Albany (in-house); Thad Mirer; January 1977–January 1979.

Mirer examined the wealth-holding behavior of the aged, using the life-cycle approach. He found that wealth declines modestly, or perhaps not at all, with age in cross-section regression analysis. This study is now unnder revision. Data source: 1968 Survey of the Demographic and Economic Characteristics of the Aged.

(16) The Wealth Holding Behavior of the Aged. SUNY Albany (in-house); Thad Mirer; September 1977–December 1978.

This is an examination of the savings behavior of aged retired persons and couples. Mirer finds very slight dissavings, on the order of 1 percent. Dissavings were found to increase with wealth and income. This paper is now under revision. Data sources: 1963–64 Federal Reserve Wealth Surveys.

(17) The Social Security Benefit Structure: Equity Considerations of the Family As Its Basis. University of Texas, Austin; Carol Bennett.

The ratio of expected benefits to expected contributions is calculated for workers entering the social security system in 1978, by family type and earnings level. Estimates are provided to show the impact of two alternative proposals on these ratios.

(18) The Incidence of Poverty Among the Aged. University of Wisconsin, Milwaukee (in-house); Marilyn Moon; 1979.

Using an expanded definition of economic status which includes in-kind transfers, asset income imputation, intrafamily transfers, and money income, Moon finds little decrease in poverty among the aged between 1966 and 1971.

Moon also makes an argument in favor of an upwards adjustment to the SSA poverty threshold on the grounds that it underestimates the food requirements of the elderly. She also compared new findings with other recent analysis of the poverty status of the aged. Data source: Michigan Panel Study of Income Dynamics, 1971.

(19) Supplemental Security Income, Asset Tests and Equity. University of Wisconsin (Madison), Institute for Research on Poverty (in-house); Marilyn Moon; June 1979.

The treatment of assets and income from assets has important consequences for eligibility in the supplemental security income program for the aged and disabled. This paper examines the equity effects of several alternative approaches to asset-testing including those advocated in current welfare reform debates. The empircial estimates use target efficiency indicators for the measures of economic status and find considerable variation among the alternative asset treatments.

(20) Intrafamily Transfers and the Elderly. University of Wisconsin, Milwaukee; Marilyn Moon; HEW/AoA; completion October 1980.

This research project will explore alternative procedures for estimating the size and extent of transfers of resources among relatives. Included will be an analysis of the characteristics of donor and recipient families and the economic aspects of the decision to live in groups. Several alternative techniques for estimating the size of intrafamily transfers will be applied to existing data to estimate the feasibility for such analysis and the basis for recommendations for future data gathering and study.

(21) Study of Expenditure Needs in Retirement. Urban Institute (Washington, D.C.); Richard Wertheimer; HEW/SSA/ORS; completion September 1979.

The changing patterns of expenditures and of the needs of the elderly as they move into retirement are examined in this study. Data source: RHS.

(22) The Impact of Inflation on the Income and Expenditures of Older Americans. Urban Institute (Washington, D.C.); Sheila Zedlewski; September 1979–September 1980.

This study will examine the impact of inflation on the income sources and expenditures of elderly persons. The change in overall income experienced by cohorts of older Americans passing through their retirement during the period 1969–75 will be calculated, as well as the extent to which each source of their income has kept up with inflation. In addition, the impact that any loss in real income has had on the real expenditures of these persons will be estimated. The manner in which declines in real expenditures have been distributed among various consumption categories will be examined. Finally, the results of this analysis will be used to recommend policy changes which would shelter the incomes of the elderly from inflation and to predict the impact of further inflation on the elderly.

B. FAIRNESS OF TREATMENT OF SUBGROUPS OF OLDER WORKERS AND RETIREES

(1) The Social Security Retirement Test: Right or Wrong? American Enterprise Institute for Public Policy Research (Washington, D.C.); (in-house); Marshall Colberg; 1978.

The social security retirement test, especially as amended by the 1977 Social Security Act, is shown to be a burden to older people and the general economy. The 1977 legislation did little to liberalize the real earned income limits, and younger workers were put at a disadvantage. The retirement test fails to reflect geographic differences in the cost of living; is inconsistent with the IRS policy of counting unearned income (favoring earned income among the poor) and accounting for deductible expenses; and discourages delayed retirement.

(2) Providing Survivors' Benefits to Employees—Company Procedures. Brandeis University (Waltham, Mass.); James Schulz; Andrus Foundation; June 1977-September 1979.

Analysis of available data on survivors' provisions. Pilot survey of 40 firms in the Boston area to see how firms present these provisions to retiring workers who choose whether to take them or not.

(3) Portability and Reciprocity Among Single Employer Plans. George Buck Consulting Actuaries, Inc. (Washington, D.C.); George Buck; DOL/PWBP; in progress.

The purpose of this contract is to conduct an in-depth data gathering effort and analysis of the extent to which portability and reciprocity arrangements currently exist among single-employer-sponsored pension plans in the private sector. More specifically, this contract shall focus on: (1) Plans having features or portability or reciprocity with other plans; and (2) plans with provisions facilitating the transfer of pension credits by permitting lump sum distribution of vested benefits upon separation of employment prior to retirement and/or transfer of payments from outside sources toward the purchase of pension credits for new employees.

(4) Social Security and the Changing Roles of Men and Women. HEW/SSA/ORS (in-house); February 17, 1979.

This study was mandated by the Social Security Amendments of 1977 to examine differences in treatment of men and women under the Social Security Act and to analyze the inadequacies in the protection provided for homemakers as dependent spouses and women working for pay. Proposals are presented to give women eligibility for many social security benefits in their own right.

Four main subject areas are covered:

—Basic problems for women with social security.
—Comprehensive options such as the "double decker" system consisting of two separate tiers of benefits.
—Identification of limited options to improve the system.
—Specific gender-based distinctions in the law.

Also included are several appendices, including one covering income of the aged.

(5) The Inequitable Distribution of OASI Benefits Among Homemakers. University of Wisconsin (Madison); Karen C. Holden; HEW/NIA; completed 1978.

OASI spouse benefits may be interpreted as an implicit payment to wives for time spent in home work. This implicit credit is calculated for women who have spent time out of the work force and is shown to vary among wives. Because spouse benefits are based in part on husbands' earnings, women with high earning husbands tend to receive a larger implicit credit for periods of home work, a bias in favor of these women which will not be corrected by proposed reductions in spouse benefits, the payment of an explicit homemakers credit or by child care dropout years. Data sources: Exact match study and CPS.

(6) Analysis of the Relationship of Social Security Insurance to Other Federal Assistance Programs—Medicaid and Social Services; HEW/SSA/ORS (in-house).

(a) An examination of the growth in State medicaid programs resulting from the SSI program with respect to increases in numbers of persons eligible, increases in number of persons for whom medicaid bills were paid, increased costs, and changes in policy and administration of State medicaid programs. (b) An analysis of the relation of social services (title XX) to SSI caseloads in the various States, the proportion of the SSI caseload receiving services, and the achievement of the objectives of the services provided to the SSI population.

(7) Contribution of Wives' Earnings and Benefits to Total Family Income. HEW/SSA/ORS (in-house); 1980.

This project will describe present and projected contributions of wives to family income in retirement. The portion of family income which is provided by the wife's earnings and her own pension and benefit retirement income will be analyzed for couples with different income patterns. Data produced by a simulation model for women to the year 2000 will describe future patterns, changes in frequency and level of earnings and benefits of women, and their changing contribution to family income in retirement. Data source: RHS.

(8) Earnings Replacement Rates of Retired Couples: Findings From the Retirement History Study. HEW/SSA/ORS; Alan Fox; January 1979.

Using data from the Social Security Administration's longitudinal RHS, this article presents the first study of replacement rates for couples. The findings show that, though about half the wives claiming benefits in 1968–74 were retired workers, their benefits were not necessarily much larger than what they would have received as dependent spouses. Couples with retired worker wives had higher absolute retirement benefits, but the women's preretirement earnings cause the replacement rates of these couples to be lower than those of couples with dependent wives.

(9) Study of Widows Under Age 60 Without Benefits. HEW/SSA/ORS (in-house); 1978.

This study of widows between ages 45 and 60 focuses on the adequacy of the resources they command during widowhood, the effect of widowed mothers' benefits on transition into the labor force, the effect of work after widowhood on eventual total benefits, and the extent to which widows will collect benefits on the basis of their own, versus their husbands', earnings records. Data on recent widows will be gathered by mail and direct interviews.

(10) Are Women Treated Fairly in Today's Social Security System? Institute for Research on Poverty (Madison, Wis.); Richard V. Burkhauser; HEW; June 1979.

The increasing commitment of women, particularly married women, to the labor market has made the OASI one-earner model of the household obsolete. Using data from actual OASI files, this study shows that, while households currently collecting OASI benefits receive more than an actuarially fair return on their contributions, one-earner married couples do better than either two-earner married couples or single individuals. Barring radical reform of the system, however, it is difficult to propose changes consistent with both the social insurance and social adequacy goals of OASI.

(11) Wage Determination and Discrimination Among Older Workers. Institute for Research on Poverty (Madison, Wisc.); Joseph Quinn; completed June 1978.

In this paper, the determinants of the market wage rates of older workers are analyzed, using the 1969 wave of the Social Security Administration's RHS. The extent and nature of current labor market discrimination by race and sex are then examined by estimating the portion of the race and sex wage differentials which cannot be explained by observable socioeconomic characteristics. Evidence of discrimination appears in both cases and suggests that occupational segregation or crowding is more of a problem in the male-female than in the white-nonwhite case.

(12) Black-White Differences in Private Pensions: Findings from the Retirement History Survey. HEW/SSA/ORS (in-house); Gayle Thompson; February 1979.

This article compares older black workers and older white workers on coverage under private pension plans, the receipt of pension benefits upon retirement, and the job characteristics associated with both coverage and receipt. Data are from the 1969 and 1975 interviews of the RHS, and describe pre-ERISA conditions among persons in their late fifties to mid-sixties. Black workers were much less likely than white workers to have been covered by a private pension on their longest job. Moreover, among the blacks who were covered, they were less likely to have received benefits. The racial differences appear to result in part from substantial differences in job characteristics, particularly industry.

(13) Pension Coverage and Benefits, 1972: Findings from the Retirement History Survey. HEW/SSA/ORS (in-house); Gayle Thompson; February 1978.

This article, based on data from the RHS, examines coverage by an employee pension plan on the longest job, the extent to which covered workers received an employee pension upon retirement, and the size of their benefits. It also examines the joint receipt of employee pension and OASDI benefits and the size of the combined benefits. Each of these pension variables is analyzed for differences by class of worker (private wage and salary or government), sex, and characteristics of the longest job (industry, occupation, tenure, extent of employment, and annual earnings rate). The majority of completely retired individuals in their early to middle sixties in 1972 did not receive employee pension benefits in that year. Women employed in

private industry on their longest job were the most disadvantaged in this regard. Even when they did receive retirement benefits from employee pension plans, their benefits were substantially lower than those of men or of women employed in government.

(14) Informal Social Networks in Support of Elderly Blacks in the Black Belt of the U.S. National Center on the Black Aged (Washington, D.C.); William Watson; HEW/AoA; January 1977–December 1979.

1,500 persons were interviewed 'n the black belt. Questions asked related to income, previous and present employment, financial assistance received, retirement, yearly earnings, homeownership, and medicare/medicaid. Analysis is now being done.

(15) The Minority Retiree: An Untapped Resource. San Diego State University (San Diego, California); Dr. Stanford, Dr. Baty; HEW/AoA; October 1, 1979–April 1, 1980.

This project will examine the involvement of the minority retiree in community organization programs. Samples of black, Mexican-American, and white retirees in San Diego and Denver will be surveyed. These two sites were chosen since they will provide a basis for comparison with data from a previous AoA study performed by Hal Shepperd and Sara Rix. The data will include selected information on existing community organization structure and functions, and a probability sample of all persons age 55 or older in order to permit an investigation into the factors influencing community involvement in local organizations.

(16) Social Security and Labor Market Discrimination Against Women. University of Wisconsin (in-house); Marilyn Moon; fall 1978–fall 1979.

This project is an investigation of the degree to which the social security program institutionalizes labor market discrimination experienced by women during their work lives prior to retirement. More specifically, it will analyze the extent to which the OASDI benefit structure compounds wage discrimination through lower benefit levels. Data sources: CPS, Exact Match File.

(17) The Adequacy of Earnings Replacement Through Private Pensions. Urban Institute (Washington, D.C.); Gary Hendricks; HEW/AoA; completed August 1979.

This study will identify major sociodemographic and preretirement income groups which are systematically excluded from private pension benefits and measure the extent of this exclusion by comparing replacement rates. The study will explore reasons for exclusion, and develop measures of the extent of deprivation. Major data source: RHS.

(18) The Role of Pensions in Meeting the Economic Security Needs of Women. Urban Institute (Washington, D.C.); June O'Neill; DOL/PWBP; completion March 1980.

A three-phase study examining the different ways in which the economic security needs of older men and women are met. The first phase provides an overview of the income security situation of aged women according to source of income and demographic characteristics of the population. The second phase will expand the life-cycle theories of consumption and savings in order to account for sex-related differences in factors such as life expectancy and labor force participation patterns. The third phase will evaluate trends in the role of private

pensions for women over a 25-year span. Forecasts will be developed to measure the effects of female labor force participation, equal employment opportunity laws, and legal rulings requiring unisex actuarial tables on the retirement of women workers. Data sources: RHS, SIE.

(19) Empirical Study of the Relationship Between Human Capital Resources of the Elderly and Their Participation in SSI. Washington University (St. Louis, Missouri); Martha Ozawa; HEW/AoA; October 1, 1979–October 1, 1980.

The objective of this project is to study the relationship between human capital resources of the elderly and their participation in the supplemental security income program. A test will be made of the hypothesis that those elderly with substantial levels of human capital such as good health or higher skill levels have a lower probability of participating in the SSI program. Multivariate regressions will be run on data from the survey of low-income aged and disabled to test this hypothesis.

II. Financial Issues

A. ADEQUACY OF THE FUNDING OF RETIREMENT SYSTEMS AND PENSION PLANS

(1) A Study to Evaluate the Impact of ERISA On New Plan Formation. Abt Associates (Cambridge, Mass.); Robert Lake; DOL/PWBP; March 1976–July 1979.

This study examines the impact of ERISA on the recent growth of private pension and profit-sharing plans, evaluates the effect of ERISA on the structure and design of plans, and assesses the significance of shifts and trends on the participants affected by such plans. Also, the characteristics of firms and workers without plans will be determined.

(2) Preliminary Analysis of the Cost of Maintaining Pension and Health Benefits in Selected Plans. ICF (Washington, D.C.); DOL/PWBP; January 15, 1979.

This report examines the level of allowable cost increases in worker compensation under the revised wage guidelines for six collective bargaining units which are scheduled for wage renegotiations in 1979. First, cost increases required for maintenance of current benefits in pension and health care plans in each unit were projected under several different assumptions. Then, the corresponding maximum increase in wages permissible under the 7-percent limitation on increases in total compensation was calculated. Such variations in pension plan characteristics and funding levels were shown to have potentially significant impact on increases in wages. Major data source: ERISA annual reports.

(3) Study of Level of Benefits in Private Sector. DOL/BLS; Alvin Bauman; completion August 1980.

Individual employee benefit plans are analyzed in terms of characteristics such as participation requirements, funding, and various provisions. The data will be used by OPM to cost out each employee plan and by BLS for a publication summarizing various plan provisions.

(4) Effect of ERISA on the Termination of Single Employee Defined Benefit Pension Plans. GAO (in-house); completed April 1978.

This report discusses the effect of ERISA on about 7,300 pension

plans terminated during the 21-month period from September 1974 to June 1976. About 93 percent of these plans had fewer than 100 participants.

(5) An Examination and Analysis of Pension and Profit-Sharing Terminations After the Passage of ERISA. Hay Associates (Washington, D.C.); Al Fisher; DOL/PWBP; September 1976–September 1980.

This study of post-ERISA terminations of pension and profit-sharing plans evaluates reasons for, and effects of, termination on different types of participants and sponsors. Included is a control sample of ongoing plans which will be analyzed with respect to pertinent characteristics of the plans, plan participants, and employers. A model is also developed to estimate the probability of termination.

(6) Plan Costs Resulting from a Proposed Amendment to Extend Joint and Survivor Coverage of ERISA. Hay Associates (Washington, D.C.); Al Fisher; DOL/PWBP.

The impact of proposal to extend joint and survivor options to nonretired vested participants and to eliminate the 2-year waiting period is evaluated.

(7) Pre-ERISA Plan Termination Benefit Losses. Hay Associates (Washington, D.C.); Al Fisher; DOL/PWBP; February 1978–July 1979.

The costs of extending ERISA insurance protection to pre-ERISA terminations is evaluated. Actuarial statistics are used to determine the future of this group of individuals. A literature review is included.

(8) Effects of title I of ERISA on the Costs of Pension Plans. ICF (Washington, D.C.); John Valiante; DOL/PWBP; September 1976–March 1978.

An actuarial cost model is used to evaluate the impact on the private pension system of satisfying the requirements of title I of ERISA relating to minimum standards, for participation, vesting, benefit accrual, survivors benefits, and funding.

(9) Analysis of Single Employer Defined Benefit Plan Terminations, 1977. Pension Benefit Guaranty Corporation; November 1978.

This report examines the characteristics, reasons, and termination rates and trends of single employee plans which were terminated in fiscal year 1977. Findings show that the number of covered plans dropped by 5 percent in the 3 years following ERISA, but the increase in workers covered under new plans was twice the loss of coverage from plans terminated. Plan terminations reached a peak in December 1976, but by the final quarter of fiscal year 1977 new plans outnumbered plan terminations.

(10) A Study To Evaluate the Impact of ERISA on Multi-Employer Pension Plans. Towers, Perrin, Forster, and Crosby (Washington, D.C.); Ron Muling; DOL/PWBP; October 1977–September 1979.

This study is to provide PWBP and PBGC with a detailed description of the multiemployer pension plan universe, both before and after ERISA. Past trends and events will be reviewed and analyzed to explain development of the present structure, characteristics, and practices for these plans. The study will assess the impact of ERISA on these plans to date and develop projections of the nature of the multiemployer plan universe and of anticipated changes in plan practices and their effects.

(11) Financing the Civil Service Retirement System: A Threat to Fiscal Integrity. University of Pennsylvania Pension Research Council (Philadelphia, Pa.); Dan McGill; OPM/Bureau of Retirement and Occupational Health; completed April 1979.

This volume is a compilation of official and semiofficial documents pertaining to the determination of the cost of the accruing benefit obligations of the civil service retirement system and the extent to which these obligations should be funded. The theme of the basic documents in this volume is that prospective recognition of the impact of inflation on CSRS costs and liabilities is essential to the fiscal integrity of the system.

B. INCIDENCE OF COSTS OF PROVIDING FOR RETIREMENT INCOME

(1) Aggregate Economic Effects of Changes in Social Security Taxes. CBO; Helmut Wendell; September 1977–August 1978.

A technical analysis which discusses the general economic consequences of the 1977 Social Security Amendments that raised payroll taxes. Particular attention is paid to the inflationary effects of payroll tax increases and the macroeconomic effects of the 1977 amendments on wages and social security taxes.

(2) Pension Improvements Since 1974 Reflect Inflation. HEW/SSA/ORS; Robert Frumkin, Donald Schmidt; April 1979.

The authors examine changes occurring in 131 pension plans during the period from October 1974 to February 1978. The changes reflected responses to inflation and ERISA. Findings indicate that during this period, most benefit formulas reflected a real loss; the number of plans meeting ERISA standards for vesting of benefits at an early age nearly tripled (i.e., increased to nearly 100 percent); with the lowering of age and service requirements in 58 plans, the percentage of plans satisfying ERISA standards in this regard grew from 50 to 100; and by 1978 the joint and survivors options of all plans met ERISA requirements (although some plans were made less liberal after ERISA).

(3) Two Studies in the Shifting of Taxes on Labor. Michigan State University (East Lansing, Mich.); Daniel Hamermesh; HEW/SSA/ORS; first study completed April 1979; second study in progress.

These studies both aim at estimating the extent to which payroll taxes are shifted to labor. The first estimates the extent of this shift using microeconomic data. The second constructs a dynamic simulation model and inquires into the time path of shifting increased payroll taxes or subsidies. Both studies aim at providing policy advice on the extent and dynamics of employment in response to changes in taxes or subsidies of payrolls.

(4) Intergenerational Transfers of Economic Well-Being. National Planning Association (Washington, D.C.) (in-house); David Levy, Nestor Terleckyj; estimated publication date, 1980.

This project creates a model of intergenerational transfers. A methodology is developed for relating transfer payments to the retired population and to economic growth over a time horizon involving more than one generation. The behavior of the transfer system and economy is examined in the absence of smooth population growth.

C. THE EFFECTS OF PENSION PLANS ON SAVINGS AND INVESTMENTS

(1) The Impact of Social Security on Private Saving: Evidence from the U.S. Time Series. American Enterprise Institute for Public Policy Research; Washington, D.C. (in-house); Robert Barro; 1978.

This study presents results of ordinary least squares regressions on aggregate consumer expenditures in the United States, on the social security wealth variables specified by Feldstein (1974), on other life cycle variables, and on the government surplus (deficit). No data on private transfers are available for inclusion. Barro's results fail to demonstrate that social security wealth has a significant negative impact on personal savings.

(2) Intertemporal Effects of Social Security—Saving, Labor Supply, Capital Formation, and Output. HEW/SSA/ORS (in-house); 1979.

The primary focus of this report is the effect of social security on saving and labor supply, using a life-cycle model. Current research involves the estimation of aggregate econometric models of consumption and labor supply using aggregate time series data. Alternative specifications are used to test the sensitivity of results published by Feldstein and others. A corollary study will investigate the effect of social security on private pension savings, using U.S. time series data.

(3) Private Pension Savings and Inflation. HEW/SSA/ORS (in-house); John Turner; April 1979.

Turner presents empirical evidence that inflation has a large negative effect on pension saving. The model he develops incorporates the behavioral demand of individuals for pension assets. He cites evidence from the RHS that over the years 1970–74 real pension benefits fell by 13 percent and real social security benefits increased by 26 percent. Private pension savings are defined in three different ways, depending on the treatment of capital gains: omitting capital gains, including realized gains, and including realized and unrealized gains. The treatment of capital gains is shown to be an important determinant of the level of pension savings.

(4) A Re-Examination of the Link between Social Security and Savings. HEW/SSA/ORS (in-house); John B. Hagens; February 1979.

A simple overlapping generations model is developed in this study to reinvestigate the wealth and endowment redistribution effects from the introduction of pay-as-you-go social security. The major point of the paper, that society may use social security to achieve an intergenerational redistribution of wealth, is shown through developing a model treating the social security system as endogenous and assuming a non-negative private bequest constraint exists. A change in the demand for social security can result from events such as a depression, exogenous technical change, endogenous human capital investment, or unanticipated inflation.

(5) Social Security Interest Rates and Life-Cycle Consumption. Johns Hopkins University (Baltimore, Md.); Sheldon Stein; DOL/-Manpower Administration; September 1975–June 1978.

Stein extends the life-cycle theory to include social security. This is another approach to the study done by Martin Feldstein who found that social security reduces private saving. Feldstein's study had a statistical bias which Stein was able to avoid by incorporating interest rates in his model. Stein's findings were contrary to those of Feldstein.

(6) Dynamics of Labor Supply, Wages, and Asset Accumulation. National Bureau of Economic Research (Washington, D.C.); James Heckman; HEW/SSA/ORS; June 1978–June 1980.

This research addresses the economics and econometrics of household life-cycle labor supply, wage growth, and asset accumulation patterns. This project will include: (1) The comparison of dynamic models' fitting on panel data with more conventional models' fitting on cross-section data, and the formulation of integrated dynamic models of household behavior; (2) the development of econometric methods for the analysis of discrete dynamic data, and techniques that combine factor analytic and stationary time series techniques to analyze panel materials; (3) the development of a simulation module of life-cycle behavior that can be used to improve current microeconomic simulation models. Data source: MPSID.

(7) Public Employees' Pension Funds: Resources for Public Officials and Activists. People's Business Commission (Washington, D.C.); Lee Webb, William Schweke; 1978.

This comprehensive resource book discusses redirecting public employee pension fund capital into socially responsible investment projects. Included are statistics and facts on size and portfolios of pension funds and models of new investment strategies in the areas of housing, small business, and economic development. The material includes original articles and reports, speech transcripts, a glossary of financial terms, and a comprehensive list of resources and organizations.

(8) Testing the Theory of Social Security and Life-Cycle Accumulation. University of California, Los Angeles; Laurence J. Kotlikoff; June 1979.

This paper presents an econometric model of accumulated savings and of retirement age to test the life-cycle model. The results give mixed support to the life-cycle model; the present value of the social security taxes accumulated for the household is found to reduce accumulated savings, but the yield of the system to the household is significant. Also, social security is not shown to influence the expected retirement age significantly. Date source: National Longitudinal Survey data for men 45–59.

(9) Equity in Pension Plans. University of Illinois (Champaign-Urbana); Robert Ferber, Robert Pearl; HEW/ASPE; completed March 1979.

Part of development of the Survey of Income and Program Participation (SIPP), it:

(a) Defines typology of pension plans for use in determining equity value.

(b) Draws a sample of individuals by plan type, collects information from individuals, then gets releases and obtains corroboration from pension providers.

(c) Drafts questionnaires, or designs other data collection methods, for use in SIPP.

(10) A Study to Evaluate the Impact of ERISA on the Investment Behavior of Private Pension Funds. University of Pennsylvania, Wharton School (Philadelphia, Pa.); Randy Westerfield, David Cummins, John Percevale; DOL/PWBP; research in progress.

The major objective of the project is an in-depth study to assess the impact of ERISA—separate from other factors—on the investment process and behavior of private pension funds, and to estimate the impact of these changes and shifts on capital markets. The project will develop data that represent pre-ERISA and post-ERISA periods to analyze the differential effects of ERISA on specific subgroups of the private pension universe. The study will also include an analysis to identify shifts and trends in the use of professional organizations that may have taken place since passage of ERISA.

III. Employment Issues

A. DETERMINANTS OF RETIREMENT AGE

(1) Effects of Assets on Retirement Behavior. Abt Associates (Cambridge, Mass.); Joseph Friedman; HEW/SSA/ORS; completion September 1979.

Using RHS as a data source, an analysis is conducted of the effects of assets (including equity in pension and social security) on retirement, and of the effects of retirement on the size and composition of asset holdings.

(2) Older Men—The Choice Between Work and Retirement. DOL/BLS (in-house); Philip Rones; November 1978.

Major factors that contribute to the older worker's decision to remain employed are examined. The growth of retirement income is shown to provide the principal explanation for the dropping participation rates among older workers and a growing percentage of part-time and self-employed workers over 60 years of age. Also discussed are factors which influence the types of occupations and industries in which older men work, including health restraints, pension plans and mandatory retirement. Data sources: CPS, RHS, SSA's survey of newly entitled beneficiaries.

(3) Impacts of the Age Discrimination in Employment Act. DOL/OPM (in-house); Walter Townsend; June 1978–June 1980.

A study of the removal of restrictions on employment of individuals over age 65. Minimal effects are expected to be seen due to short-term nature of the study.

(4) The Effect of Social Security and Pension Policies on Retirement. Harvard University, Cambridge, Mass.; Anthony Pellechio; HEW/SSA; August 1, 1979–August 31, 1980.

The two main sections of this study deal with: (1) How workers decide to work from ages 60 to 70 and how social security wealth affects the probability of retirement; and (2) the effect of the earnings test. Results indicate that the tax rate is not important, but the exempt amount is. Theoretical and econometric background is provided, and the estimated probability of retirement by age and wealth is displayed. Data source: RHS (exact match file).

(5) An Asset Maximization Approach to Early Social Security Acceptance. Institute for Research on Poverty (University of Wisconsin, Madison); Richard Burkhauser; HEW; completed December 1978.

This paper, using a sample from the 1973 Social Security exact match file, tests the importance of economic choice variables on the decision of male workers to take social security retired worker benefits

initially upon reaching age 62. Since acceptance of social security constrains market earnings given social security, acceptance is weighted against changes in the asset value of private pension and social security benefits if they are postponed.

The results indicate, as expected, that the less than actuarially fair postponed benefits system is positively related to early pension acceptance, although the net effect of this cannot be disentangled from the effect of higher asset values using this methodology and data.

(6) An Empirical Study of the Effects of Pensions and the Saving and Labor Supply Decisions of Older Men. Math Tech (Princeton, N.J.); Alan Blinder, Roger Gordon, Donald Wise; DOL/PWBP; February 1978.

A model of the existence of private pensions as an institution is developed based on the theory of the structure of contracts chosen by workers and firms within the context of imperfect information and risk. In this framework, wages paid at a given point in time usually do not equal a worker's current marginal productivity. The model predicts the existence of nonvested pension arrangements and early retirement provisions. A life-cycle model of the asset accumulation and retirement decisions of workers is developed. A "wage equation" is used relating wage rates to pensions, experience on and off the job, and various additional factors serve as input in the asset and retirement equations. The effect of pensions on labor supply near retirement is complex, but they may delay the timing of voluntary retirement, perhaps explaining why many pensions are accompanied by compulsory retirement provisions.

(7) Retirement in the Dual-Career Family. North Carolina State University (Raleigh, N.C.); Kathryn Anderson, Thomas Johnson, Robert Clark; HEW/SSA/ORS; December 1977–December 1979.

The retirement process of both spouses is examined using simultaneous labor supply decision models, and optimal control models of life-cycle economic activity with endogenous retirement ages. Dual-career families will be contrasted with single-earner families, and the public policy implications of increasing labor force attachment of married women will be explored. Data source: RHS.

(8) Federal Law Enforcement and Firefighters Study. President's Commission on Law Enforcement; Craig Pettibone; OPM; July 1979–April 1980.

This research is to determine if there is a need for a mandatory retirement age for law enforcers, firefighters, and air traffic controllers.

(9) The effect of Mandatory Retirement on Retirement Behavior. Princeton University (Princeton, N.J.); Cordelia W. Reimers; 1980.

A study to determine if mandatory retirement provisions cause workers to retire even earlier. A theoretical model is under development; empirical work will use the RHS.

(10) Econometric Studies of Retirement Behavior. Stanford University (Palo Alto, Calif.) and National Bureau of Economic Research (Washington, D.C.); Michael Boskin; National Science Foundation; completion June 30, 1980.

Boskin develops a stochastic model of retirement and estimation of the effects of changing wage and social security options on retirement behavior. These efforts will be disaggregated by subpopulations and will refine previous work which provides no support for the theory

that poor health is the major determinant of retirement. Data source: RHS.

(11) Family Economic Status and Labor Force Participation of Older Women. University of Florida (Gainesville); John Henretta; HEW/SSA/ORS; April 1, 1978–March 31, 1980.

A sociological investigation of relationship of the labor force participation of older women to family economic status, as determined by the characteristics of the family and the two spouses. Data source: RHS.

(12) An Investigation of the Retirement Decision Process. University of North Carolina (Chapel Hill, N.C.); Benson Rosen, Thomas Jerdee; HEW/AoA; completion March 1980.

The authors develop and refine a model of the retirement decision process in organizations. The project uses field studies with a simulation of administrative decisionmaking that permits manipulation and control of selected variables to estimate their effects on retirement decisions. Regional and national samples of managers and personnel administrators will participate.

(13) Social Security and the Labor Supply of Older Men. University of Western Ontario (London, Ontario); G. Carliner; DOL/ETA; completion August 1980.

This study will estimate the impact of social security benefits and the OASI earnings test on the labor force behavior of men over age 62. The impact of ill health, mandatory retirement, layoffs, and availability of private pension income will also be analyzed. Data base: NLS.

(14) Probability Models for Pensionable Service. University of Wisconsin (Madison); Izzet Sahin, Yves Balcer (in-house); completion date 1980.

The authors develop a model which predicts the probability distribution and expected value of pensionable service (defined as service with the firm given that a worker has met vesting standards). These numbers are functions of the level of interfirm mobility in the workforce, indexing for inflation, minimum and maximum participation ages, and other factors. It is shown that given current mobility patterns, gradual vesting over the first 10 years of service, for example, would be more advantageous to employees than the more common practice of full vesting after five years. It is also shown that inflation-indexed pensions are more generous than nonindexed pensions.

(15) Qualifying Service Under ERISA Vesting Standards—A Comparative Analysis. University of Wisconsin (Madison); Izzet Sahin, Yves Balcer; (in-house), completion date 1979.

The authors compare the three alternative minimal vesting procedures designated by ERISA with respect to employee termination rates. A second analysis was performed in regard to career qualifying service.

(16) Determinants of the Age of Retirement and Patterns of Labor Supply During the Retirement Years. University of Wisconsin (Madison); Frank Sammartino; DOL/ETA; 1980.

The author is conducting research on a model which combines life-cycle labor supply and pension acceptance models into a unified framework. Data source: RHS.

(17) Studies of Involuntary Retirement and the Effects of Raising the Mandatory Retirement Age. Urban Institute, James R. Storey;

Mathematica Policy Research, William Morrill; University of Wisconsin (Madison); Lee Hansen; DOL/ESA; March 1979–December 1980.

This study examines involuntary retirement and the effect of raising the mandatory retirement age limit in order to assist in understanding responses of employers and employees to probable labor market changes created by increasing or eliminating the mandatory retirement age. In addition, factors that support mandatory retirement policy will be investigated, as will special considerations requiring mandatory retirement for exempted executives and tenured faculty employees.

(18) Direct and Indirect Consequences of Increasing or Eliminating the Mandatory Retirement Age. Urban Institute (Washington, D.C.); Richard Wertheimer; HEW/AoA; completed September 1979.

This research estimates direct effects, including changes in work behavior of older workers, and how these changes will affect their economic and social well-being. An econometric model will be designed to capture the employment effects on nonaged workers, especially youths, minorities and women. RHS was used for estimation of direct effects.

(19) The Aging of America: A Portrait of the Elderly in 1990. Urban Institute (Washington, D.C.); Richard Wertheimer, Sheila Zedlewski; HEW/AoA; completed December 31, 1978.

The numbers and characteristics of the elderly are projected to the year 1990 using The Urban Institute's DYNASIM model. Two alternative scenarios are considered, reflecting different assumptions about labor force participation among the elderly. Under the low participation scenario, it is assumed that the decline in labor force participation among the elderly witnessed in the past two decades will continue. Under the high participation scenario, it is assumed that changes in government economic policy, a restructuring of the social security economic policy, the raising of the minimum mandatory retirement age, and changes in the age structure of the population will bring about a reversal of past trends. It is concluded that, by altering incentives in order to encourage late retirement, it will be possible to both reduce the tax burden on the working population and increase the income of the elderly.

(20) Early Retirement and the Labor Market Dynamics of Older Workers. Yale University (New Haven, Conn.); Thomas Gustafson; DOL/ETA; January 1980.

One part of this study will investigate different definitions of retirement ranging from descriptive measures, pension receipt, and labor force participation. The second part considers the relative importance of poor health versus retirement benefits in explaining the decision to retire.

B. THE EFFECTS OF RETIREMENT POLICIES AND SOCIOECONOMIC TRENDS ON LABOR MARKETS

(1) Employment Environment for the Elderly. American Institute for Research (Washington, D.C.); Harold Shepard; HEW/AoA; January 1977–April 1979.

Longitudinal data (every 4 months over 16 months) has been collected from 500 respondents, male and female, aged 40 to 69, in each

of two cities with contrasting unemployment rates. Information gathered includes labor market activity (job search, etc.), income, pension coverage (but not expected benefits), attitudes toward retirement and social security, and homeownership (no other asset information).

(2) The Future of the Retirement Age Policy in Five European Countries. American Institute for Research (Washington, D.C.); Harold Shepard; HEW/AoA; January 1979–January 1981.

The experiences of Germany, France, England, Sweden, and Denmark are examined in dealing with changes in demographics, biomedical and economic factors and the costs of retirement plans. Assessment also will be made of the impact that a change in the age of retirement would have on the current and projected trends.

(3) Impact of Pension Plans and Labor Force Attachment. American University (Washington, D.C.); Bradley Schiller; HEW/AoA; completed 1978.

Data were collected on 133,000 employees of the 300 largest corporations and matched to their social security records. Pension coverage is differentiated in terms of 12 variables, and the particular effects of various provisions can be analyzed. For example, the points at which workers are vested or become eligible for early retirement can be identified, and the responses can be observed. A cross-sectional study ("Labor Force Attachment Due to Pensions") of the effect of pension provisions on quit rates and wages has been completed.

(4) Private Pension Plans and Employment Opportunities. American University (Washington, D.C.); Bradley Schiller; HEW/AoA; completed July 1979.

Follow-on from previous work described above. This study will assess the extent to which pension plans restrict employment opportunities for older workers. It intends to develop cost and employment models that explicitly recognize plan provisions and to examine the experiences of other countries. Quantitative analysis will build on models and longitudinal pension-employment data base already developed by the researchers, and will extend to RHS and NLS.

(5) Impact of Public Employment and Training Programs on Older Workers. Appalachian State University (Boone, N.C.); Jean-Pierre Courbois, Michael McDonough; HEW/AoA; completed July 1979.

This study will investigate the extent to which the needs of older workers are served; recommend ways of improving the programs; analyze participation rates and measure impacts on older workers. Data primarily taken from base-lines of Comprehensive Employment Training Act prime sponsors; identification of useable data sources is one important task. Analyses will compare aggregate performance of programs and effectiveness for specific target groups and services.

(6) Effect of Social Security on Labor Supply. Columbia University (New York); Marjorie Honig, Giora Hanoch; HEW/SSA and HEW/NIA; August 1977–June 1980.

The labor supply function is estimated on the older population to yield elasticities with respect to various policy variables—including the implicit tax rate, the earnings maximum, and the size of the benefit. A longitudinal microdata file has been created from the 1969, 1971 and 1973 waves of the retirement history survey, merging social security data for two populations: white married males and white female heads of families.

(7) National Retirement Policy in the U.S. Committee for Economic Development (Washington, D.C.); Ken McLinnean; University of Pennsylvania (Philadelphia, Pa.); Dan McGill; (in-house); June 1979–December 1980.

Major demographic and financing problems which have created serious obstacles in both social security systems and private and public pensions are identified. It is anticipated that the study will recommend changes in social security and reforms in both private and public pensions. These changes will emphasize the need to provide greater opportunities and incentives for the elderly to participate in the labor market beyond the traditional labor market age and reduce the burden of financing our retirement policies.

(8) Demographic Structure of Unemployment Rates. Cornell University (Ithaca, N.Y.); Ronald Ehrenberg; National Commission on Employment and Training Policy; completion August 1979.

This study will examine unemployment rates for various groups, including workers aged 55 to 64 and 65 plus, and estimate the impact of policy parameters on transition probabilities. Data source: gross flow data on workforce participation from the CPS.

(9) The Retirement Decision of the Self-Employed. Institute for Research on Poverty (University of Wisconsin, Madison); Joseph Quinn; HEW/SSA/ORS; January 1978–May 1979.

Cross-sectional and longitudinal analysis of retirement decisions and plans of the self-employed. The study will attempt to isolate the effects of personal and financial characteristics, labor market conditions, and job characteristics. Determinants and effects of partial withdrawal from the labor force will be emphasized. Data source: RHS.

(10) Life-Cycle Work and Consumption Under Social Security. Massachusetts Institute of Technology (Cambridge, Mass.); L. Jay Helms, Peter Diamond; HEW/SSA/ORS; February 1978–August 1979.

The authors develop an empirically based life-cycle simulation for use in exploring the effects of specific facets of the social security system on the allocation of work and leisure through the life-cycle and, consequently, on production and distribution. The model will allow estimation of the impact of specific proposed policy changes.

(11) Simulation Model of Social Security. National Bureau of Economic Research (New York, N.Y.) (in-house); Anthony Pellechio; January 1979–June 1980.

As part of the larger project on tax simulation, this project will develop a simulation model of how the social security system will work in the future. The project is now in early specification stages. The behavior response to the payroll tax and to the size of benefits will be emphasized.

Other issues considered are taxation of two-earner families, homeownership, adjustments for inflation, corporate tax integration, and social security. Probable sources: CPS and/or exact match file.

(12) Employment Opportunities for Middle-Aged Older White and Non-White Women. National Center on Black Aged (Washington, D.C.); Dolores Davis; HEW/AoA; October 1, 1979–October 1, 1980.

This study will involve: (1) A comprehensive literature review of mid-life employment opportunities; (2) an assessment of employment barriers and opportunities for older women including an analysis of

policy issues and existing programs; and (3) recommendations for further research and potential legislation. Interviews with appropriate Federal officials in Washington, D.C. will also be conducted.

(13) Outlawing Age Discrimination: Economic and Institutional Responses to the Elimination of Mandatory Retirement. North Carolina State University (Raleigh, N.C.); Robert Clark, David Barker, Steven Cantrell; HEW/AoA; completed July 1979.

The following areas are examined: (1) Retirement patterns: Estimates the impact of retirement determinants to isolate the effect of mandatory retirement. Compares characteristics of voluntarily and involuntarily retired. Uses three-activity life-cycle model: RHS and NLS data. (2) Responses of firms: Discovers characteristics of those affected by mandatory retirement. Theory explaining existence of mandatory retirement provisions will be developed using literature on contracts, layoffs, and human capital, and tested using RHS and NLS. (3) Employment and mobility: estimates of recent change in ADEA on employment and promotion of youth, women, and minorities. A demographic model of promotions will be adapted and translated into a complex simulation model.

(14) Employment Patterns of Displaced Homemakers. University of Baltimore (Baltimore, Md.); Nijole Benokraitis; HEW/APA; October 1, 1979–October 1, 1980.

This project involves an analysis of the entry and reentry processes of displaced homemakers, their perception about job availability, required skill level, and so forth, and the impacts of training and reeducation. A sample of 200 women who participated in a training program in 1978, will be reinterviewed to determine what their employment experiences have been and how their perceptions have changed.

(15) The Effects of Changing Demographics on the Labor Market for the Elderly. University of Virginia (Charlottesville); William J. Serow; HEW/AoA; completed July 1978.

This study analyzed the impact of the changing demographic composition of the U.S. population and found that the shift would create stronger incentives for greater labor force participation among the elderly. The three major reasons for these increased incentives include the projected problems with the social security system, a decline in the real income of older persons, and a labor shortage around the year 2015.

(16) A Cross-National Study of Part-Time Employment for the Elderly. Urban Institute (Washington, D.C.); Jean Corbo; HEW/AoA; completion August 1979.

This study will examine the demand for, and supply of, part-time work, considering such factors as mandatory retirement, age discrimination, and employer attitudes. Relevant experience of other countries with part-time employment and phased retirement will be analyzed. Involves case studies of personnel agencies, analysis of RHS, and exploration of other data sources, including collective bargaining agreements.

(17) Displaced Homemakers: How and Why Do Older Workers Seek and Find New Types of Work. Urban Institute (Washington, D.C.); Jean Vanski, Richard Toikka; HEW/AoA; completion March 1981.

This research will provide estimates on the size and characteristics of the population of displaced homemakers, as well as define the problems associated with their reentry to the paid labor market. The effects of personal attitudes, productivity, labor market knowledge, and discrimination on their probability of obtaining employment will be assessed. The quality of job placement with respect to occupational distributions, wage rates, job characteristics, skill utilization and worker satisfaction will be also examined. A model demonstration project will be designed.

(18) A Demographic-Economic Model of the OASDI System. Williams College (Williamstown, Mass.); Joseph Anderson; HEW/SSA/ORS; July 15, 1977–June 30, 1979.

Development of a long-term demographic-economic model of the U.S. labor market and a long-term financial model of the OASDI program. The labor market model will forecast growth of output and earnings distributions by demographic group, providing the basis for the OASDI model. The integrated model is designed to investigate the implications of changes in population growth and composition for the social security system.

IV. Issues of System Coordination and Design

A. The Private/Public Mix of Retirement Income

(1) Are Private Pensions Doomed? Brookings Institution (Washington, D.C.); Alicia Munnell; April 1978.

Munnell's analysis of time series data shows that social security has tended to crowd out private pension savings and keep private pensions from growing at the rate that would have otherwise applied. She asserts that if the average OASI replacement rate had been initially established at the current level of 45 percent, the private pension system would not exist in its present form. According to Munnell, recent increases in social security payroll taxes will cause reductions in private pension contributions by employers, since the two are close substitutes. High-wage employees will be affected the most. Persistent inflation may also jeopardize private pension plans, since only the public sector can guarantee benefits that keep pace with inflation.

(2) The Economics of Private Pensions. Brookings Institution (Washington, D.C.); Alicia Munnell, John Brittain; DOL; January 1979–August 1980.

Issues covered in this monograph include funding of pensions, financial issues of companies, income distribution, tax treatment, questions raised by inflation and indexing, effects of savings and investments, relationship to other pension programs (especially social security), and the tendency of social security to be a substitute for private pensions.

(3) The Role of Private Pensions in Meeting the Economic Security Needs of the Aged—Part B. Brookings Institution (Washington, D.C.); John Brittain; completed February 1979.

An empirical analysis is done with a sample of dual social security/private pension recipients, based on CPS and income-tax data. Issues analyzed are adequacy of pensions, importance of pensions as an income source, and wage replacement from pensions.

(4) A Study to Develop Forecasting Models Which Will Project the Private Pension System. ICF (Washington, D.C.); Colin Bladon; DOL/PWBP; September 1976–January 1980.

A comprehensive study in which different models were used to forecast various areas such as number of plans and participants, amount of contributions and assets, number of retirees receiving pension benefits, number of beneficiaries, and aggregate amount of benefits and benefit levels received by individuals. The models will be constructed to project the future implications for the above variables of changes in pension plan characteristics.

(5) Impact of Inflation on Private Pensions of Retirees, 1970–74: Findings from the Retirement History Study. HEW/SSA/ORS (in-house) Gayle Thompson; November 1978.

Many private pensions plans have provided benefit increases or other forms of protection against inflation to their retired workers in recent years. This article, based on panel data from the RHS, examines the extent to which completely retired persons in their sixties benefited from these increases from 1970 to 1974. The private pension benefits of retirees rose slightly during the period, but their purchasing power declined sharply on account of the considerable growth in the inflation rate. Social security benefits, on the other hand, rose substantially more than the consumer price index. As a result, total retirement benefits largely maintained or nearly maintained their purchasing power.

B. ISSUES IN PUBLIC EMPLOYEE RETIREMENT PLANS

(1) The Public Pension Crisis: Myth, Reality, Reform. American Federation of State, County and Municipal Employees (Washington, D.C.); (in-house); Robert Kalman.

A study of State and local plans is being conducted by AFSCME. Results have been published in various journals:

(a) "State and Local Regulation of Pension Plans" appeared in July 1978 Journal of Pension Planning and Compliance.

(b) "How Much Federal Regulation Do Public Funds Need?" appeared in August 1978 Pension World.

(c) "Current Federal Law Regulating State and Local Pension Plans" appeared in September 1978 Employee Benefits Journal.

(2) Retirement Proposals and Alternatives in the Military. CBO; Robert Hale, Joel Slackman; completion December 1979.

This study was initiated at the request of the House Armed Services Committee to review changes proposed by the Military Compensation Administration. It relates to compensation as a whole, but primarily to the retirement system, and will assess other alternatives in terms of cost and military retention.

(3) Wages and Retirement System Characteristics in Public Sector (6 Components). Cornell University (Ithaca, N.Y.); Ronald Ehrenberg, Robert Smith; National Science Foundation; October 1977–September 1979.

(a) "A Framework for Evaluating State and Local Pension Plans"; Robert Smith, Ronald Ehrenberg.

Reviews relevant economic theory and empirical evidence relating to pension reform in state and local sector.

(b) "Pension Under-Funding and Wages in the Public Sector"; Robert Smith.

An empirical analysis of the extent retirement characteristics, including under-funding, are related to wage rates of public employees.

(c) "Retirement System Characteristics and Compensating Wage Differentials in the Public Sector"; Ronald Ehrenberg.

Two basic hypotheses concerning the relationship between the wages and salaries of public employees and the characteristics of the pension plans that cover them:

(i) Do employees with more generous pension plans tend to receive lower wages, ceteris paribus?

(ii) Do employees who are more certain to receive the retirement benefits to which they are entitled tend to receive lower wages, ceteris paribus?

(d) "Correlates of Underfunding of Public Sector Retirement Systems"; Ronald Ehrenberg.

(e) "The Costs of Defined Benefit Pension Plans and Firm Adjustment"; Burt Barnow, Ronald Ehrenberg.

Theoretical paper indicating how employer's costs of various pension plans vary with employees' age and years of service. Even if employers use the actuarial concept of level funding, the economic cost to employers is not level. No defined benefit plan can be "age neutral" since it costs more to provide a given level of benefits for an older worker than a younger worker.

(f) "Retirement Policies, Employment and Unemployment"; Ronald Ehrenberg.

Consideration of the influence of policies such as social security, ERISA, the Manhart case, and early retirement provisions in private collective bargaining on the level and distribution of employment and unemployment.

(4) Reserves Compensation System Study. Department of Defense (in-house); Rear Admiral Richard Altmann; completed 1978.

Presidentially directed review of the entire compensation system for the Reserves, including design and recommendations for a new system. Retirement is dealt with only as it affects the reserves, and an incentive program for enlisting is established.

(5) Level of Benefits Project for Office of Personnel Management. DOL/BLS (in-house); September 1980.

In an attempt to understand how to achieve full comparability in pay between the federal and private sectors, this study will collect data and perform analysis on private sector benefit plans, including pensions. Consideration will be given to revamping the Federal compensation system to include value of benefits such as pensions, health insurance and paid leave.

(6) Universal Social Security Coverage Study. HEW (in-house); Joe Bartlett; July 1978–March 1980.

To study in consultation with OPM and other agencies, the advisability, feasibility, and impact of alternatives for universal coverage by social security. HEW will be concerned with sources of income, the effects of various retirement programs on individuals, and impacts on program financing.

(7) State and Local Retirement Systems. HEW/SSA/ORS (in-house).

Study of coverage and beneficiary data for those State and local government retirement plans which have 1,000 or more employees also covered by social security. Their program provisions, contribution levels, vesting, and inflation escalator protection provisions are described.

(8) Pension Task Force Report on Public Employee Retirement Systems. House Committee on Education and Labor; Subcommittee on Labor Management Relations; completed March 1978.

Study included a 1975 census of Federal, State, and local government retirement systems to identify universe and characteristics of public pension plans. Information on administration, benefit structure, finances and funding was gathered from a sample of public plans. A separate survey of public funds focused on investment operations. State and local laws affecting retirement systems were recorded and analyzed.

(9) Report of President's Commission on Military Compensation. President's Commission on Military Compensation; Charles Zwick; Department of Defense; June 1977–April 1978.

Recommendations for the military retirement system. Proposed radical overhaul such that vesting would occur after 10 years of military service rather than 20. Other recommendations include: Deferral of retiree's pay until retiree reaches a certain age; option to receive a lump sum payment upon retirement.

(10) Public Pension Plans: Standards of Design, Funding and Reporting. University of Pennsylvania, Wharton School (Philadelphia, Pa.); H. Winklevoss, D. McGill; National Science Foundation, 1979.

Public pension plans have evolved over time without consideration of all factors concerning benefit structure, funding policy, and disclosure of financial information about plans. Consequently, the objective of this study is to provide standards for public benefit plans with respect to each of these matters.

(11) Analysis of State and Local Pension Issues. Urban Institute (Washington, D.C.); George Peterson; HUD, DOL/PWBP, President's Commission on Pension Policy, HEW Task Force on Universal Coverage; September 1978–October 1980.

This study applies a combination of actuarial and economic analysis techniques to State and local pension issues. Pension benefits will be analyzed in terms of: (1) Adequacy in relation to earnings replacement and minimum living standards; and (2) comparability among jurisdictions and in relation to the private sector. Pension costs will be assessed for various State and local systems using a variety of cost-determining mechanisms. The sensitivity of cost estimates to actuarial assumptions will be described. Pension funding will be considered through examination of the many different approaches advocated for, or used in, the State and local sector. Pension fund investments will be considered in terms of current investment policy and possible greater emphasis on socially useful investments. The economic impact of State and local pensions will be analyzed in terms of intergenerational impacts on taxpayers and workers, the fiscal position of State and local governments, and the functioning of national capital markets.

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